Healthy Food Partnership Reformulation Program: Wave 1, 4-year progress report – preliminary analysis of participating companies and wider market

September 2024

Acknowledgements

The Healthy Food Partnership Secretariat would like to thank all participating food companies and manufacturers for their continuous engagement and ongoing commitment in the development of the data and metrics for this report. The Partnership Reformulation Program relies on the participation of food companies to help instil real and positive change in Australia's food supply and we wish to acknowledge the importance of their contribution to the Program.

The Secretariat would also like to express appreciation for the efforts of the Reformulation Working Group in establishing the reformulation targets on which the Partnership Reformulation Program is based. The Reformulation Working Group played a key role in setting reformulation targets for over 30 food product categories, to ensure the program improves the healthfulness of Australia's food supply.

Contents

Acknowledgements	2
List of Abbreviations	4
Executive summary	5
1.0 Introduction	7
1.1 Scope of this report	8
2.0 Methodology	8
2.1 Data sources	8
2.2 Data analysis	9
3.0 Results	10
3.1 Participation	10
3.2 Progress toward achieving sodium reduction targets at 4-years: Participating companies	12
3.3 Progress towards achieving saturated fat reduction targets at 4-years: Participating companies	20
3.4 New to market products: Participating companies	23
3.5 Progress toward achieving sodium reduction targets at 4-years: Wider market data	23
3.5 Progress toward achieving saturated fat reduction targets at 4-years: Wider market data	23
3.6 Comparison of performance of participating companies against the wider market data	23
Low achievement of saturated fat targets in the market, particularly for sausages and dry pastries confirms previous observations in this report on the need to consider these targets for technical feasibility, whether further sub-categories are required, or whether serving size reduction is more appropriate.	26
3.7 Market coverage	26
3.8 Limitations	28
4. Conclusion	28
Appendix 1: Partnership Reformulation Program food categories and reformulation targets – Wave 1 (July 2020 – June 2024)	29
References	36

List of Abbreviations

Abbreviation	Definition
Executive Committee	Healthy Food Partnership Executive Committee
PRP	Partnership Reformulation Program
Partnership	Healthy Food Partnership
Secretariat	Healthy Food Partnership Secretariat
SKU	Stock Keeping Unit
g	Grams
mg	Milligrams

Executive summary

The Partnership Reformulation Program (PRP) was established under the Healthy Food Partnership (Partnership) to work collectively with food industry to voluntarily reduce saturated fat, sodium and sugar in manufactured and processed foods and drinks.

The PRP consists of voluntary reformulation targets for a range of foods and beverages, currently separated into 2 'waves'. Wave 1 consists of 28 categories/subcategories for sodium and 5 categories/subcategories for saturated fat. Wave 2 consists of 9 categories/subcategories for sugar and 5 categories/subcategories for sodium. Each reformulation target has an implementation period of four years from the date they were set (excluding breakfast cereals which has an implementation period of 5 years).

Monitoring reports are provided by participating food companies at baseline, the end of 2-years and 4-years for each wave. Reports are submitted to the Department of Health and Aged Care Healthy Food Partnership Secretariat (Secretariat) for processing in the month following the end of each reporting period. Reporting periods are as follows:

- Wave 1: July 2020 to 30 June 2022 (2-year progress); July 2020 to 30 June 2024 (4-year progress)
- Wave 2: July 2021 to 30 June 2023 (2-year progress); July 2021 to 30 June 2025 (4-year progress); July 2021 to 30 June 2026 (5-year progress)¹

This report is an assessment of progress for Wave 1 reformulation targets after 4 years of implementation.

Data analysis methods

This report includes multiple data sources.

Participating food companies submitted data for all products in the company's portfolio within the Wave 1 food categories. Companies provided data for baseline (July 2020) and 4-years (30 June 2024).

Data on the broader food supply was obtained from the FoodSwitch database, as an extract of data collected in September 2023. This data was compared against the data used to determine the targets, obtained from the CSIRO FoodTrack database in 2017.

Data on market share was obtained from the Australian Bureau of Statistics and market coverage was estimated from the FoodSwitch database.

Analysis was undertaken by the Secretariat to report on the following:

- Total number of products at baseline and 4-years
- Status of products as either delisted or new to market products
- Percentage of new to market products meeting the targets
- Average sodium and saturated fat content of products at baseline and 4-years (all products in the food category at the reporting period);

¹ Note that reports for Breakfast Cereals will be due at the end of 2-years (June 2023) and the end of 5-years (June 2026). The Healthy Food Partnership Executive Committee agreed to adjust the period from four to five years to allow for the additional challenges with reformulating two nutrients co-currently.

- Average nutrient reduction achieved within 4-years implementation (only for products on the market at both baseline and 4-years);
- Number and proportion (%) of products meeting sodium and saturated fat targets at baseline, 2 years and 4 years; and
- Number and proportion (%) of products within 5% of meeting sodium or saturated fat targets at baseline and 4 years.

Reporting on data is at the aggregate level and did not include analysis at the individual company level. Verification measures were limited, the Secretariat relied on participating food companies to accurately report all nutrition information for the reporting period.

Headline results

Four-year data has been submitted by participating manufacturers for all foods subject to the Wave 1 reformulation targets (n = 1900).

- A total of 277 delisted and 426 new to market products were reported over the 4-year period. Analysis
 of new-to-market products indicates that 80% of new-to-market products met the sodium targets and
 49% of new-to-market products met the saturated fat targets in 2024.
- For sodium, 69% of products (n = 1,774) met the reformulation targets at baseline (July 2020), compared to 82% (n = 1,900) in June 2024.
- The average sodium reduction was 3%. The largest reductions in sodium were recorded in the *Crumbed battered proteins: Fish* (15% reduction) and *Processed meat: Frankfurts and saveloys* (13% reduction) categories.
- For saturated fat, 49% of products (n = 79) met the reformulation targets in 2024, compared to 57% (n = 95) at baseline. Negligible changes in average saturated fat content of food categories were observed.
- Looking at the wider market, 93% of food categories saw an increase in the percentage of products meeting the sodium targets between 2017 and 2023. However, all products participating in the Wave 1 reformulation program had higher rates of meeting the reformulation targets compared to the wider market.
- The proportion of the market meeting reformulation targets is high for Plain corn, rice and other 'grain-cake' biscuits; Cheddar and cheddar style variety cheese products; Soups; Salt and vinegar snacks and Sweet Bakery Cakes, muffins and slices.
- For the saturated fat targets, a higher proportion of products in the wider market are meeting the saturated fat targets compared to participating products.

1.0 Introduction

Background

In late 2015, the Australian Government established the Healthy Food Partnership (Partnership) with the aim of improving the dietary habits of Australians by making healthier food choices easier and more accessible, and by raising awareness of appropriate food choices and portion sizes. The Partnership provides a mechanism for government, the public health sector and the food industry to cooperatively tackle obesity, encourage healthy eating and empower food manufacturers to make positive changes through voluntary approaches.

The work within the Partnership includes consideration of portion size, food reformulation, and food service environments. This multifaceted approach reflects the fact that dietary choices are determined through a complex interplay of factors and thus there is not one single policy measure that can be introduced to shift populations onto a healthier diet. The work of the Partnership is also complemented by other initiatives including the Australian Dietary Guidelines, the Health Star Rating system and nutrition labelling, which enable consumers to make informed healthy choices when purchasing and consuming food.

Most Australians consume a diet that is significantly out of step with dietary guidelines (ABS 2023a). The Australian population on average has nutrient intakes that exceed the established Nutrient Reference Values for sodium, saturated fat and the limit for added/free sugars established by the World Health Organization (ABS 2024, ABS 2013, WHO 2015). To support Australians to achieve dietary patterns that are more consistent with the Australian Dietary Guidelines, the Partnership Reformulation Program (PRP) has been established and prioritises three nutrients for reformulation: sodium, sugars and saturated fats.

Reformulation seeks to influence the food and drink environment and, when used in parallel with other initiatives, it can lead to changes in dietary intake for a population. The food environment can be influenced by making small, incremental positive changes to product formulations, sometimes referred to as 'health by stealth', providing consumers with wider access to, and a larger number of, more healthful products.

Reformulation program

The PRP comprises two waves of reformulation targets for food and drink categories/subcategories. Wave 1 refers to the reformulation targets implemented in July 2020, consisting of sodium targets for 28 food categories/subcategories and saturated fat targets for 5 food categories/subcategories. Wave 2 refers to the reformulation targets implemented in July 2021, consisting of sodium targets for five food categories/subcategories, and sugar targets for 9 food and drink categories/subcategories. Each target has an implementation period of 4 years from the date they commenced, however 'breakfast cereal' has an implementation period of five years. This was to recognise that this category has reformulation targets for both sodium and sugar. The reformulation targets apply to 80% of the product category by sales volume, with businesses to show effort towards reformulating the remaining 20% of products. The PRP food categories and reformulation targets are provided at Appendix 1.

For further information on the development of the PRP and the rationale for food reformulation, see the report: Evidence Informing the Approach, Draft Targets and Modelling Outcomes.

Participating companies

The initial invitation for voluntary participation in the PRP was circulated to over 400 Australian food and manufacturing companies in 2020. The Secretariat has received fourteen (n=14) voluntary commitments to PRP as of September 2024. This is an increase of seven (n=7) companies since the mid-way point in 2022. Of the fourteen participating companies, thirteen (n=13) have products relevant to the Wave 1 sodium and saturated fat reformulation targets. Participating companies include some of Australia's major food manufacturers and retailers. The following companies have consented to be identified as participating in the PRP:

- Kellanova
- Kraft Heinz Australia
- Mars Food Australia
- Mondelez
- Nestle Australia Ltd
- PepsiCo
- Sanitarium Health Foods Company
- Simplot
- Tip Top Bakeries
- Unilever
- Woolworths

1.1 Scope of this report

This report covers industry progress (to 30 June 2024) during the 4 years of implementation of the Wave 1 sodium and saturated fat reformulation targets.

The analysis in this report is based on data provided from participating food companies and data extracted from the CSIRO FoodTrack database and the George Institute for Global Health's FoodSwitch database.

The data from participating food companies is self-reported and has not been independently verified by a third-party or otherwise verified by the Secretariat. It should also be noted that data reported by participating food retailers includes own brand products only.

The findings of the report are largely aligned with an <u>independent analysis</u> undertaken by the Australian Bureau of Statistics (ABS), with the main differences attributable to the use of different data sources and sample sizes (n values). Both reports show similar trends in sodium and saturated fat reduction, and the proportion of products meeting reformulation targets is consistent across both analyses. Where there are differences, these are explained by the scope of data (e.g., this report by the Secretariat includes a broader assessment of participating products against the wider industry, while the ABS report uses scanner data weighted by sales volume).

2.0 Methodology

2.1 Data sources

This report includes multiple data sources.

Participating companies

In July 2024, baseline (July 2020)² and 4-year data (30 June 2024) was requested from participating food companies for Wave 1 products.

Participating food companies were responsible for providing the sodium, saturated fat content and product information (brand, product name and stock keeping unit (SKU) or barcode) of Wave 1 products at these reporting periods. Data were submitted using a reporting and monitoring template.

Food companies were requested to provide information on retail food products only. Foods manufactured for distribution to food service is out of scope.

Broader food supply

Data on the broader food supply was obtained from the FoodSwitch database, as an extract collected in September 2023. This data was compared against the data used to determine the targets, obtained from the CSIRO FoodTrack database in 2017. As the CSIRO FoodTrack database is no longer produced, the FoodSwitch database was used to reflect the composition of the broader food supply. These databases have different data collection methodologies, and therefore comparison between the two datasets has limitations.

Market share

Data on market share in 2022 was obtained from the Australian Bureau of Statistics analysis of the two-year progress of Wave 1 of the PRP. The ABS data only reflects the market share of participating companies at the 2-year point of Wave 1 of the Partnership Reformulation Program and therefore does not reflect the market share of companies that have joined the Reformulation Program since the 2-year reporting, or changes in market share of participating companies since this reporting point. Updated market share information will be published in the ABS 4-year Wave 1 reporting which is due in 2025.

The market share was calculated using weighed sales data. This market coverage was estimated from the FoodSwitch database. It was determined by dividing the number of participating brands by the total number of brands in the FoodSwitch database. This is not sales weighted.

2.2 Data analysis

Participating companies

Initial data cleaning was undertaken to identify and address duplicate data entries (same SKU or barcode). Clarification was sought from participating food companies where the data provided appeared to be a duplicate or erroneous. Some food companies reported baseline data for products that entered the market post July 2020 and current data for products that were de-listed prior to July 2024, the baseline and July 2024 data for new-to-market and de-listed products respectively was not included in this analysis.

Following the data cleaning process, data provided by participating food companies was analysed. There were two different types of analyses:

² While baseline assumes 2020 data, this was not available for all products. Therefore, the analysis may not represent true baseline for all products/categories.

- Analysis of reformulation achieved was calculated only on the products that existed at both time points (i.e. does not include products that were new to market or de-listed during the 4-year period)
- Analysis of the proportion of products meeting the targets were 'point in time' assessments and
 calculated using all products that existed at those time points (e.g. baseline data includes products that
 were later de-listed, and 4-year data includes products that are new to market).

Data analysis was undertaken at the aggregate level and did not include analysis at the individual company level.

Broader food supply

FoodSwitch data were checked for accuracy of classification and products were re-classified/excluded as appropriate. The database was also checked for nutrient values that didn't seem plausible. If the correct value couldn't be verified, then the product was excluded. Duplicates were also identified and excluded.

3.0 Results

3.1 Participation

All thirteen companies participating in Wave 1 showed progress in the implementation of sodium reduction targets. Low participation across the Australian food industry remains a key challenge for the PRP, however the number of participating companies continues to increase. There has been an increase of seven (n=7) companies since the mid-way point in 2022.

Across the thirteen companies participating in the PRP with products relevant to the Wave 1 targets, a total of 1900 products were reported at 4-years for the 28 sodium targets and 162 products at 4-years for the 5 saturated fat targets. This is 1.7 times the number products reported on at the 2-year point, where 1,110 products were reported for sodium and 104 products were reported fat (ABS 2023b).

1490 products reporting sodium content existed at both time points. 1774 Products existed at baseline. 1900 Products existed at 4-years.

107 products reporting saturated fat content existed at both time points at both time points. 168 products existed at baseline. 162 products existed at 4-years.

Given the nature of companies participating in the program, several food categories were underrepresented in the 4-year reporting (see Figure 1).

Four food subcategories had less than 10 products reported. These subcategories were:

- Processed meat: Frankfurts and Saveloys,
- Crumbed and battered proteins: Prawns, squid and calamari,
- Savoury biscuits: Plain corn, rice and other 'grain-cake' biscuits and
- Gravies and Sauces: Pesto.

This contrasts with the *Leavened breads* subcategory which was the largest category in Wave 1 with a total of 425 products reported at year 4. The diversity in the number of products reported for the subcategories not only reflects the type of products participating food companies manufacture, but also highlights the

importance of promoting greater industry participation in the PRP, particularly in under-represented product categories. This will allow for diversification in reported products and increase the impact of the PRP.

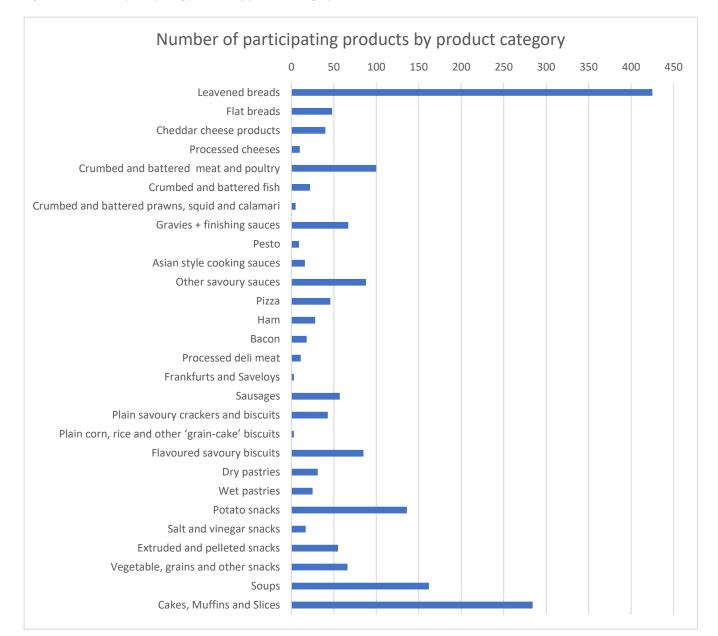


Figure 1. Number of participating products by product category

3.2 Progress toward achieving sodium reduction targets at 4-years: Participating companies

This report presents progress in achieving the reformulation targets at the end point of the 4-year implementation period. Of the products reported for sodium, the proportion of products meeting the targets increased from 69% at baseline to 74% after 2-years, and 82% after 4-years. The proportion of products within 5% of the targets was similar at baseline (7%), 2-years (6%) and 4-years (7%).

Of the participating products in scope for sodium reformulation, 28% recorded a decrease between June 2020 and June 2024. Sodium levels of these products declined by an average of 3%.

For 5 subcategories, 100% of products met the targets at 4-years. These subcategories were:

- Savoury snacks: Salt and vinegar snacks (94% at baseline)
- Gravies and Sauces: Asian style cooking sauces (74% at baseline)
- Processed meat: Frankfurts and Saveloys (33% at baseline)

- Cheese: Processed cheeses (100% at baseline)
- Savoury biscuits: Plain corn, rice and other 'grain-cake' biscuits (100% at baseline)

For Savoury snacks: Salt and vinegar snacks and Processed meat: Frankfurts and Saveloys, this was achieved solely through reformulation of existing products. For Gravies and Sauces: Asian style cooking sauces, this was achieved through reformulation and the delisting of two products which were not meeting the target.

For Cheese: Processed cheeses and Savoury biscuits: Plain corn, rice and other 'grain-cake' biscuits, where 100% of products were meeting the targets at baseline, this was achieved through all new to market products meeting the targets. In addition Cheese: Processed cheeses also saw reformulation to lower levels of sodium despite all products already meeting the targets. It is also important to note that for these categories where 100% of products met the target at baseline, this reflects the portfolio of participating companies rather than ease of achieving the target. In the wider market only 45% of products in the Cheese: Processed cheeses category met the target at baseline (see Section 3.6). However for the category Savoury biscuits: Plain corn, rice and other 'grain-cake' biscuits, 75% of products in the wider market met the target at baseline which indicates that the target may have been set too high. Despite 100% of Plain corn, rice and other 'grain-cake' biscuits meeting the reformulation targets at both baseline and 4-years, there was an average increase in sodium content of 64mg/100g in this category. There were also increases in sodium content in the categories Cheese: Cheddar and cheddar style variety cheese products (7mg/100g), Savoury biscuits: Flavoured savoury biscuits, crackers and 'grain-cake' biscuits (11mg/100g), Savoury pastries: Wet pastries (1mg/100g), Savoury snacks: Salt and vinegar snacks (17mg/100g).

An additional 4 subcategories saw increases in the number of products meeting the targets between baseline and 4-years of 25% or more. These were:

- Processed meat: Bacon (56% up to 94%)
- Processed meat: Ham (55% up to 86%)
- Sausages (56% up to 81%).
- Crumbed and battered proteins: Fish (19% up to 73%)

For all 4 categories, this was achieved through a combination of reformulation and new product development.

Three subcategories saw a decrease in the percentage of products meeting the targets between baseline line and 4-years. Two new products entered the market in the *Cheese: Cheddar and cheddar style variety cheese products*, taking the compliance rate from 100% down to 95%. One new product entered the market in *Savoury pastries: Wet pastries*, reducing the compliance rate from 85% to 80%. One product in *Savoury biscuits: Flavoured savoury biscuits, crackers and 'grain-cake' biscuits* increased its sodium content by 5mg, bringing it above the target by 3mg.

There was low (under 60%) achievement of sodium reformulation targets in the categories *Processed deli meats* and *Extruded and pelleted snacks*. This indicates there is a need to consider these targets and explore potentially disaggregating these categories further with appropriate targets developed for the relevant subcategories.

Asian style cooking sauces Salt and vinegar snacks Frankfurts and Saveloys Processed cheeses Cheddar cheeses 100% Crumbed/battered meat + poultry Bacon - Dry pastries Cakes, Muffins and Slices

Plain savoury biscuits 90% Soups Ham Other savoury sauces Leavened breads Sausages 80% Crumbed/battered prawns, squid + calamari Wet pastries Flavoured savoury biscuits Crumbed/battered fish 70% Gravies + finishing sauces Flat breads Pesto Other snacks Pizza 60% Potato snacks Extruded and pelleted snacks 50% 40% Processed deli meat 30% 20% 10% 0% 2020 2024

Figure 2. Proportion of sub-categories which met the respective sodium targets - Baseline and 4-years

Across all 28 categories/subcategories for sodium reduction, 26 had an average sodium content below the sodium targets at 4-years, with the exceptions being *Processed meat: Processed deli meat* and *Bread: Flat breads*. See Figure 2.

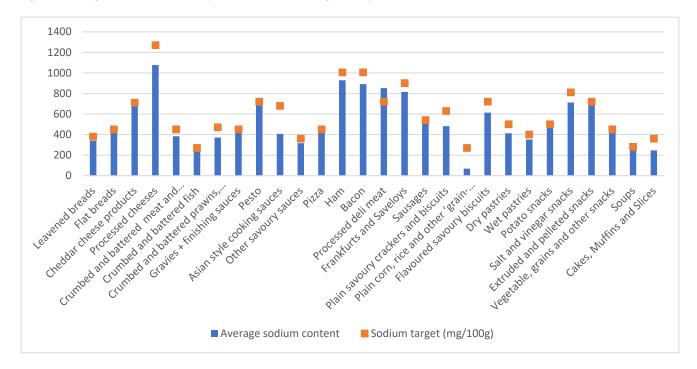


Figure 3. Average sodium content compared to the sodium targets – 4-years

A summary of the analysis of sodium content of Wave 1 products at 4-years can be found in Table 1: Summary of key results for Wave 1 sodium targets - baseline and 4-years.

Table 1: Summary of key results for Wave 1 sodium targets - baseline and 4-years

Food category: Sub- category	Total number of reported products at baseline	Total number of reported products at 4-years	2020 Sodium targets (mg/ 100 g)	Average sodium content (mg per 100 g) Baseline (July 2020)	Average sodium content (mg per 100 g) 4-years (30 June 2024)	Average sodium reduction between baseline and 4-years ³ (mg/100 g)	Number of products meeting targets Baseline (July 2020)	Proportion of products meeting targets Baseline (July 2020)	Number of products meeting targets 4-years (30 June 2024)	Proportion of products meeting targets 4-years (30 June 2024)
Bread: Leavened breads	394	425	450	352	340	8	263	67%	360	85%
Bread: Flat breads	55	48	380	465	456	(个3)	36	65%	32	67%
Cheese: Cheddar and			710							
cheddar style variety cheese products	38	40		666	674	(个4)	38	100%	38	95%
Cheese: Processed cheese	(a)	10	1270	1084	1077	38	(a)	100%	10	100%
Crumbed and battered	(4)	10		1301	2377		(6)	13070	13	20070
proteins: Meat & Poultry	60	100	450	420	383	28	50	83%	95	95%
Crumbed and battered			270							
proteins: Fish	16	22		294	237	46	(a)	19%	16	73%

³ Calculated by determining the change in a nutrient in an individual product over the two time points, and then taking the average of the change across all products present at baseline and 4-years (new or de-listed products are not included in this analysis). This is not the same as the difference in the average nutrient content at baseline and 4-years as these averages reflect the total number of products in the food category at that point in time.

ricultity 1 ood 1 drenership her		- 0	- , -	-						
Food category: Sub- category	Total number of reported products at baseline	Total number of reported products at 4-years	2020 Sodium targets (mg/ 100 g)	Average sodium content (mg per 100 g) Baseline (July 2020)	Average sodium content (mg per 100 g) 4-years (30 June 2024)	Average sodium reduction between baseline and 4-years ³ (mg/100 g)	Number of products meeting targets Baseline (July 2020)	Proportion of products meeting targets Baseline (July 2020)	Number of products meeting targets 4-years (30 June 2024)	Proportion of products meeting targets 4-years (30 June 2024)
Crumbed and battered proteins: Prawns, Squid and Calamari	(a)	(a)	470	449	371	33	(a)	67%	(a)	80%
Gravies and Sauces: gravies and finishing sauces	64	67	450	491	442	24	31	48%	46	69%
Gravies and Sauces: Pesto	(a)	9	720	717	688	(个15)	(a)	50%	6	67%
Gravies and Sauces: Asian style cooking sauces	19	16	680	482	407	48	14	74%	16	100%
Gravies and Sauces: other savoury sauces	79	88	360	341	316	21	54	68%	75	85%
Pizza	65	46	450	446	423	13	38	58%	30	65%
Processed meat: Ham	22	28	1005	967	929	56	12	55%	24	86%
Processed meat: Bacon	16	18	1005	945	892	43	9	56%	17	94%
Processed meat: Processed deli meat	11	11	720	929	852	77	(a)	27%	(a)	36%

Treaterly 1 ood 1 drenership Ker		-0 -	1							
Food category: Sub- category	Total number of reported products at baseline	Total number of reported products at 4-years	2020 Sodium targets (mg/ 100 g)	Average sodium content (mg per 100 g) Baseline (July 2020)	Average sodium content (mg per 100 g) 4-years (30 June 2024)	Average sodium reduction between baseline and 4-years ³ (mg/100 g)	Number of products meeting targets Baseline (July 2020)	Proportion of products meeting targets Baseline (July 2020)	Number of products meeting targets 4-years (30 June 2024)	Proportion of products meeting targets 4-years (30 June 2024)
Dunanced march.			000							
Processed meat: Frankfurts and saveloys	(a)	(a)	900	1010	815	195	(a)	33%	(a)	100%
Sausages	41	57	540	529	507	64	23	56%	46	81%
Savoury biscuits: Plain savoury crackers and biscuits	41	43	630	482	482	1	35	85%	39	91%
Savoury biscuits: Plain corn, rice and other 'grain-cake' biscuits	(a)	(a)	270	5	69	0	(a)	100%	(a)	100%
Savoury biscuits: Flavoured savoury biscuits, crackers and 'grain-cake' biscuits	77	85	720	604	615	9	59	77%	63	74%
Savoury pastries: Dry pastries	33	31	500	422	413	8	29	88%	29	94%
Savoury pastries: Wet pastries	26	25	400	351	351	(个2)	22	85%	20	80%

Food category: Sub- category	Total number of reported products at baseline	Total number of reported products at 4-years	2020 Sodium targets (mg/ 100 g)	Average sodium content (mg per 100 g) Baseline (July 2020)	Average sodium content (mg per 100 g) 4-years (30 June 2024)	Average sodium reduction between baseline and 4-years ³ (mg/100 g)	Number of products meeting targets Baseline (July 2020)	Proportion of products meeting targets Baseline (July 2020)	Number of products meeting targets 4-years (30 June 2024)	Proportion of products meeting targets 4-years (30 June 2024)
Savoury snacks: Potato			500							
snacks	124	136		498	491	17	58	47%	85	63%
Savoury snacks: Salt and vinegar snacks	16	17	810	696	712	46	15	94%	17	100%
Savoury snacks: Extruded and pelleted snacks	53	55	720	751	710	37	24	45%	30	55%
Savoury snacks: Vegetables, grains and other snacks	59	66	450	435	427	22	32	54%	43	65%
Soups	138	162	280	252	251	5	112	81%	142	88%
Sweet Bakery: Cakes, muffins and slices	310	284	360	270	246	17	248	80%	262	92%
Total (b)	1774	1900	-	420	407	30	1225	69%	1578	83%

a- Figures have been confidentialised due to the small number of products reported in the category.

b- Total includes confidentialised cells.

3.3 Progress towards achieving saturated fat reduction targets at 4-years: Participating companies

There was limited progress in products meeting the 5 saturated fat reformulation targets. There were 95 (57%) products meeting the targets at baseline compared to 79 (49%) at 4-years. Negligible change was observed in the average saturated fat content for products that existed at both time points. This was largely due to individual products increasing in saturated fat content between baseline and 4-years. When examining the products through a 'point in time' assessment, in 3 of the 5 saturated fat food categories/subcategories, average saturated fat content at baseline and 4-years was at or below the reformulation targets.

Of the participating products in scope for saturated fat reformulation and present at both time points, 21% recorded a decrease between June 2020 and June 2024. Saturated fat levels of these products declined by an average of 14%. Conversely, 24% of products recorded an increase in saturated fat levels by an average of 27%.

Low achievement of the saturated fat targets for *Pizza, Sausages* and *Savoury pastries: Dry pastries* indicates it is necessary to assess these targets to ensure they are technically feasible or whether further sub-categories are required. Alternate approaches to reducing saturated fat intakes, such as serving size reduction may also be considered if these targets are unrealistic.

Figure 4. Proportion of sub-categories which met the respective saturated fat targets - Baseline and 4-years

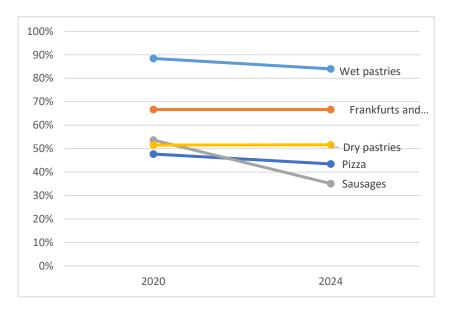
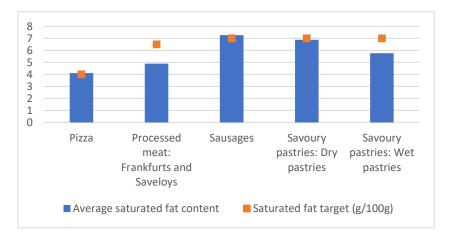


Figure 5. Average saturated fat content compared to the saturated fat targets – 4-years



A summary of the analysis of saturated fat content of Wave 1 products at 4-years can be found in Table 2: Summary of key results for Wave 1 saturated fat targets – baseline and 4-years.

Table 2: Summary of key results for Wave 1 saturated fat targets – baseline and 4-years

Food category: Sub-category	Total number of reported products at baseline	Total number of reported products at 4-years	Partnership Reformulation Program Saturated Fat targets	Average saturated fat content (g per 100 g) Baseline (July 2020)	Average saturated fat content (g per 100 g) 4-years (30 June 2024)	Average saturated fat reduction between baseline and 4-years (g /100 g) 4	Number of products meeting targets Baseline (July 2020)	Proportion of products meeting targets Baseline (July 2020)	Number of products meeting targets 4-years (30 June 2024)	Proportion of products meeting targets 4-years (30 June 2024)
Pizza	65	46	4g / 100 g	4.2	4.1	0.0	31	48%	20	43%
Processed meat: Frankfurts and saveloys	(a)	(a)	10% reduction across products with saturated fat levels exceeding 6.5g per 100 g	5.0	4.9	0.1	(a)	67%	(a)	67%
Sausages	41	57	7g / 100 g	6.5	7.3	(个0.2)	22	54%	20	35%
Savoury pastries: Dry			7g / 100 g							
pastries	33	31		7.5	6.9	(个0.3)	17	52%	16	52%

⁴ Calculated by determining the change in a nutrient in an individual product over the two time points, and then taking the average of the change across all products present at baseline and 4-years (new or de-listed products are not included in this analysis). This is not the same as the difference in the average nutrient content at baseline and 4-years as these averages reflect the total number of products in the food category at that point in time.

Food category: Sub-category	Total number of reported products at baseline	Total number of reported products at 4-years	Partnership Reformulation Program Saturated Fat targets	Average saturated fat content (g per 100 g) Baseline (July 2020)	Average saturated fat content (g per 100 g) 4-years (30 June 2024)	Average saturated fat reduction between baseline and 4-years (g /100 g) 4	Number of products meeting targets Baseline (July 2020)	Proportion of products meeting targets Baseline (July 2020)	Number of products meeting targets 4-years (30 June 2024)	Proportion of products meeting targets 4-years (30 June 2024)
Savoury pastries: Wet pastries	26	25	7g / 100 g	5.8	5.8	(个0.2)	23	88%	21	84%
Total (c)	180	173		5.7	6.0	(个0.1)	101	57%	75	49%

a- Figures have been confidentialised due to the small number of products reported in the category.

c- Total does not include confidentialised cells.

3.4 New to market products: Participating companies

While the focus of the PRP is reformulation, companies have reported they are using the PRP reformulation targets to inform new product development. Analysis of new-to-market products indicates that 80% of new-to-market products met the sodium targets and 49% of new-to-market products met the saturated fat targets in 2024.

For 8 categories, 100% of new-to-market products met the sodium targets. These were:

Cheese: Processed cheeses

Crumbed and battered proteins: Prawns, squid and calamari

Gravies and Sauces: Asian style cooking sauces

Processed meat: Bacon

Savoury biscuits: Plain savoury crackers and biscuits

• Savoury biscuits: Plain corn, rice and other 'grain-cake' biscuits

Savoury snacks: Salt and vinegar snacks, and

Savoury snacks: Extruded and pelleted snacks.

There was significant variability in the percentage of new-to-market products that met the saturated fat targets by subcategory. Of the new-to-market products, 80% of *Savoury pastries: Wet pastries* and 73% *Savoury pastries: Dry pastries* met the saturated fat targets. Conversely, only 32% of new-to-market *Sausages* met the saturated fat targets.

3.5 Progress toward achieving sodium reduction targets at 4-years: Wider market data

This report also presents progress in achieving the reformulation targets at the end point of the 4-year implementation period by the wider market. For 26/28 (93%) food categories, the percentage of products meeting the sodium targets increased between 2017 and 2023. The most notable differences were seen in *Soups* (80% meeting the target, up from 57%) *Processed cheeses* (62% meeting the target, up from 32%), *Leavened breads* (59% meeting the target, up from 38%), *Potato snacks* (61% meeting the target, up from 36%), *Pesto* (53% meeting the target, up from 32%) and *Salt and vinegar snacks* (74% meeting the target, up from 47%).

There were 2 categories where no improvement was seen in the percentage of products meeting the targets. These were *Cheddar and cheddar style variety cheese products* (74% meeting the target, down from 82%) and *Asian style cooking sauces* (45% meeting the target, down from 49%). However, it should be noted that these changes are small and may be due to differences between the databases (with the baseline determined using FoodTrack while the 4 year data is from Foodswitch.

The Healthy Food Partnership Secretariat is aware that some companies are using the reformulation targets without formally signing up to the reformulation program. Some of these changes in the food supply could be due to the reformulation targets, in addition to other trends in food composition over the last 7 years.

3.5 Progress toward achieving saturated fat reduction targets at 4-years: Wider market data

For saturated fat, the broader market had higher rates of achieving the reformulation targets compared to participating products. Between 2017-2023 there was an increase in the proportion of the wider market meeting reformulation targets for 3 categories and a decrease in the proportion meeting the reformulation targets for *Pizza* (71% in 2017 compared to 60% in 2023) and *Dry pastries* (43% in 2017 compared to 52% in 2023).

3.6 Comparison of performance of participating companies against the wider market data

For sodium, all food categories have more products from participating companies meeting the reformulation targets compared to wider market data. The categories with the largest differences between participating companies and the wider market were:

- Processed cheeses (100% vs 62%)
- Meat and poultry (95% vs 57%)
- Prawns, squid and calamari (80% vs 40%)
- Asian style cooking sauces (100% vs 45%)
- Frankfurts and Saveloys (100% vs 35%)
- Sausages (81% vs 35%)

Table 4: Comparison of performance of participating companies against the wider market data for sodium targets

Subcategory	% products meeting the targets in 2017 – wider market	% products meeting the targets in 2023 – wider market ⁵	% Products meeting target in 2024 (participating companies -end of Wave 1 reporting)
Leavened bread	38%	59%	85%
Flat breads	48%	59%	67%
Cheddar and cheddar style variety cheese products	41%	74%	95%
Processed cheeses	45%	62%	100%
Meat and poultry	41%	57%	95%
Fish	45%	48%	73%
Prawns, squid and calamari	38%	40%	80%
Gravies and finishing sauces	43%	58%	69%
Pesto	32%	53%	67%
Asian style cooking sauces	49%	45%	100%
Other savoury sauces	43%	63%	85%
Pizza	38%	51%	65%
Ham	48%	52%	86%
Bacon	54%	65%	94%
Processed deli meats	24%	25%	36%
Frankfurts and Saveloys	24%	35%	100%
Sausages	27%	35%	81%
Plain savoury crackers and biscuits	60%	67%	90%

⁵ Includes products from companies participating in the Partnership Reformulation Program

Subcategory	% products meeting the targets in 2017 – wider market	% products meeting the targets in 2023 – wider market ⁵	% Products meeting target in 2024 (participating companies -end of Wave 1 reporting)	
Plain corn, rice and other 'grain-cake' biscuits	75%	88%	100%	
Flavoured savoury biscuits, crackers and 'grain-cake' biscuits	58%	64%	74%	
Dry pastries	55%	62%	94%	
Wet pastries	53%	54%	80%	
Potato snacks	36%	61%	63%	
Salt and vinegar snacks	47%	74%	100%	
Extruded and pelleted snacks	34%	49%	55%	
Vegetable, grain and other snacks	33%	45%	65%	
Soups	57%	80%	88%	
Sweet Bakery - Cakes, Muffins and Slices	63%	71%	92%	

The proportion of the market meeting reformulation targets is high (over 70%) for Plain corn, rice and other 'grain-cake' biscuits, Cheddar and cheddar style variety cheese products, Soups, Salt and vinegar snacks and Sweet Bakery - Cakes, Muffins and Slices. This indicates that reformulation targets for these product categories could potentially be strengthened to further drive reformulation since lower sodium levels appear feasible in these categories.

For saturated fat, achievement of the reformulation targets was higher in the broader market for the categories *Pizza, Frankfurts and Saveloys, Sausages* and *Wet pastries*. Achievement of the saturated fat target was the same in the market and for PRP companies for *Dry Pastries*.

Table 5: Comparison of performance of participating companies against the wider market data for saturated fat targets

Subcategory	% products meeting the targets in 2017 – wider market	% products meeting the targets in 2023 – wider market ⁶⁷	% Products meeting target in 2024 (participating companies -end of Wave 1 reporting)
Pizza	71%	60%	43%
Frankfurts and Saveloys	24%	76%	67%
Sausages	50%	45%	35%

⁶ Includes products from companies participating in the Partnership Reformulation Program

⁷ Includes products from companies participating in the Partnership Reformulation Program

Dry pastries	43%	52%	52%
Wet pastries	14%	86%	84%

Low achievement of saturated fat targets in the market, particularly for sausages and dry pastries confirms previous observations in this report on the need to consider these targets for technical feasibility, whether further subcategories are required, or whether serving size reduction is more appropriate.

3.7 Market coverage

Greater market coverage will improve the impact of the Partnership Reformulation Program. As seen in Table 6, some food categories have greater market coverage than others. The categories with the greatest market share are *Potato snacks, Sausages, Leavened breads,* and *Cakes, muffins and slices*. The categories with the lowest market share are *Dry savoury pastries, wet savoury pastries, processed deli meats, bacon,* and *other savoury sauces*.

Table 6: Wave 1 Food Categories and market share

Food category	Sodium from participating products as a proportion of sodium from all products, 2020-2189	Saturated fat from participating products as a proportion of saturated fat from all products, 2020-21 ¹⁰¹¹	% of market coverage in 2024 ¹²
Leavened breads	49%		39%
Flat breads	15.3%		15%
Cheddar and cheddar style variety cheese products	20.1%		24%
Processed cheeses	20.6%		21%
Coated meat and poultry	14.6%		11%
Coated seafood	7.6%		31%
Prawns, squid and calamari	n/a		36%
Gravies and Sauces: Gravies + finishing sauces	n/a		35%

⁸ Source: Australian Bureau of Statistics, Healthy Food Partnership Reformulation Program: Wave 1, two-year progress 15/02/2023. This is weighed sales data, using supermarket scanner data.

⁹ This data is based on participating companies in 2022. Additional companies have joined the program since these figures were calculated.

¹⁰ Source: Australian Bureau of Statistics, Healthy Food Partnership Reformulation Program: Wave 1, two-year progress 15/02/2023. This is weighed sales data, using supermarket scanner data.

¹¹ This data is based on participating companies in 2022. Additional companies have joined the program since these figures were calculated.

¹² Determined by dividing the number of participating brands by the number of brands in the TGI database. This percentage is not sales weighted.

Food category	Sodium from participating products as a proportion of sodium from all products, 2020-2189	Saturated fat from participating products as a proportion of saturated fat from all products, 2020-21 ¹⁰¹¹	% of market coverage in 2024 ¹²
Pesto	6.9%		21%
Asian style cooking sauces	1.5%		11%
Other savoury sauces	8.3%		9%
Pizza	29.4%	34%	36%
Ham	6%		19%
Bacon	11.6%		10%
Processed deli meat	6.2%		10%
Frankfurts and Saveloys	13.1%	n/a	15%
Sausages	52.4%	54%	50%
Plain savoury crackers and biscuits	10.3%		18%
Plain corn, rice and other 'grain-cake' biscuits	19.6%		25%
Flavoured crackers/biscuits	3.1%		14%
Dry savoury pastries	12.8%	15%	7%
Wet savoury pastries	12.6%	15%	10%
Potato snacks	3.1%		77%
Savoury snacks: Salt and vinegar snacks	n/a		21%
Extruded/pelleted snacks	6.2%		26%
Vegetable/grain snacks	6.8%		16%
Soups	3.7%		14%
Cakes, muffins and slices	43.7%		44%

Healthy Food Partnership Reformulation Program: Wave 1 4-year report 3.8 Limitations

Participating companies

As the PRP is a voluntary program, data are self-reported by participating companies with companies assuming full responsibility for the accuracy of the product information submitted. A key limitation of the data analyses in this report is the absence of validation measures to verify data reported by companies.

Broader food supply

Data on the broader food supply was obtained from two different sources (FoodTrack 2017 and FoodSwitch 2023), each with different collection and verification methods. As such, direct comparisons should be viewed with caution. The FoodSwitch data is also not as up to date as the food company reporting data which was provided to the Healthy Food Partnership Secretariat in mid-2024.

Market coverage

The percentage of the market covered by participating companies is a crude calculation based on the number of brands from participating companies, divided by the number of brands represented in the FoodSwitch database. The calculation doesn't take into account sales data. True market share may be higher or lower than estimated.

The ABS market share data only reflects the market share of participating companies at the 2-year point of Wave 1 of the Partnership Reformulation Program and therefore does not reflect the market share of companies that have joined the Reformulation Program since the 2-year reporting, or changes in market share of participating companies since this reporting point. Updated market share information will be published in the ABS 4-year Wave 1 reporting which is due in 2025.

4. Conclusion

The results suggest participating food companies have made progress towards achieving the sodium reformulation targets, and that participation in the Partnership Reformulation Program is driving greater sodium reformulation compared to market trends.

However, lack of progress in meeting the saturated fat targets, particularly for *Pizza, Sausages* and *Savoury pastries*: *Dry pastries* warrants consideration of whether these targets are appropriate and technically feasible, or whether serving size reduction is a more appropriate approach for reducing saturated fat consumption in the population.

Increasing the number of participating companies across all categories would increase the impact of the PRP, as shown by the reformulation efforts of participating companies compared with the wider market data. In particular, prioritising increased participation across the Savoury pastries, Processed meats, and Crumbed and battered proteins categories, where participation and the percentage of products meeting the targets is low, may increase the impact of the program.

Appendix 1: Partnership Reformulation Program food categories and reformulation targets – Wave 1 (July 2020 – June 2024)

Partnership Food Category	Sub-category	Nutrient target (maximum)
Bread Products made by baking a dough prepared from cereal flours or meals and water. Includes bread mixes.	Leavened breads Products made by baking a yeast-leavened dough prepared from cereal flours or meals and water and bread mixes.	Sodium 380mg per 100 g
	Flat breads Products made by baking an unleavened or slightly-leavened dough prepared from cereal flours or meals and water.	Sodium 450mg per 100 g
Cheese Hard and soft cheese products made from dairy, including processed and unprocessed varieties.	Cheddar and cheddar style variety cheese products Mild, matured, tasty, extra tasty, vintage and other cheddar cheeses.	Sodium 710mg per 100 g
	Processed cheeses All processed cheese products; products obtained from milk, heated and melted, usually with added emulsifying salts, to form a homogeneous mass.	Sodium 1270mg per 100 g

Partnership Food Category	Sub-category	Nutrient target (maximum)
Crumbed and battered proteins	Meat and poultry	Sodium
Meat, poultry and seafood which have been coated with a crumb or batter made from flour or flour-alternative. Including chilled	Meat (e.g. beef, veal, lamb) and poultry (e.g. chicken, turkey) which have been coated with a crumb or batter.	450mg per 100 g
and frozen varieties.	Fish	Sodium
	Fish which has been coated with a crumb or batter.	270mg per 100 g
	Prawns, squid and calamari	Sodium
	Prawns, squid or calamari which has been coated with a crumb or batter.	470mg per 100 g
Gravies and Sauces	Gravies and finishing sauces	Sodium
Sauce-type products which are major components of a meal and are designed to be added to foods during preparation, rather than	Gravies and finishing sauce products which are designed to be served over food upon serving or as it finishes cooking.	450mg per 100 g/ml
at the table. Products within this category are designed to be mixed with rice or pasta or noodles, and/or meat and vegetables	Pesto	Sodium
before consumption and can be simmered, baked or stir fried with the added ingredients. May be chunky or smooth in consistency and the packaged product may contain other ingredients such as vegetables and/or meat. Also includes gravies and finishing sauces	A sauce traditionally made with basil, garlic, pine nuts or other nuts, olive oil, parmesan or similar cheeses, and salt. May include other herbs and/or vegetables and flavourings, and is a major characterising component of a meal and designed to be added to foods during preparation, rather than at the table. Includes both shelf stable and chilled varieties.	720mg per 100 g

Partnership Food Category	Sub-category	Nutrient target (maximum)
that are designed to be served over food upon serving or as it finishes cooking.	Asian style cooking sauces	Sodium
Any sauces, used for multiple cooking purposes, which could be considered in two reformulation categories, should be classified in line with the on pack imagery, preparation instructions and instructions and instructions and instructions.	Sauces based on replicating Asian flavours, often based on high sodium sauces such as soy, fish or oyster sauce and/or labelled as noodle sauce or stir-fry sauce, which are major characterising components of a meal and are designed to be added to foods during preparation, rather than at the table. Includes both shelf stable and chilled varieties. Products within this category do not require reconstitution or the addition of liquids such as tomato-based sauces or pastes, cream, coconut milk or stock.	680mg per 100 g/ml
	Other savoury sauces	Sodium
	All other sauce-type products used in cooking and not already included in other categories, which are major characterising components of a meal and are designed to be added to foods during preparation, rather than at the table. Includes both shelf stable and chilled varieties. Products within this category do not require reconstitution or the addition of liquids such as tomato-based sauces or pastes, cream, coconut milk or stock.	360mg per 100 g/ml
Pizza	Pizza	Sodium
Commercially produced pizza dough, with toppings (vegetable, cheese, meat, fish or alternatives) which only requires cooking or re-heating (i.e. no construction). Includes chilled and frozen varieties.	Commercially produced pizza dough, with toppings (vegetable, cheese, meat, fish or alternatives) which only requires cooking or re-heating (i.e. no construction). Includes chilled and frozen varieties.	450mg per 100 g Saturated fat 4g per 100 g

Partnership Food Category	Sub-category Sub-category	Nutrient target (maximum)
Processed meat	Ham	Sodium
Meat and poultry preserved by smoking, curing, salting or chemical preservatives.	Cured pork product generally containing pork, starch, salt, mineral salts, sugar, antioxidant, sodium nitrate, spices and water. Includes all fat varieties.	1005mg per 100 g
Meat product contains no less than 300g/kg meat, where meat either singly or in combination with other ingredients or additives, has undergone a method of processing other than boning, slicing,	Bacon	Sodium
dicing, mincing or freezing, and includes manufactured meat and cured and/or dried meat flesh in whole cuts or pieces.	Cured and smoked pork product generally containing meat, sugar, mineral salts, antioxidant, nitrite and water. Includes all fat varieties.	1005mg per 100 g
	Processed deli meat	Sodium
	Processed and/or reformed meat products (containing pork, beef, or chicken) with added ingredients such as starch, salt, cereal, sugar, spices, flavour, sodium nitrite/nitrate, preservatives and water. Products are typically served cold and often sliced or diced. Includes emulsified luncheon meats.	720mg per 100 g
	Frankfurts and Saveloys	Sodium
	Frankfurts/Frankfurters, hot dogs and saveloys.	900mg per 100 g
		Saturated fat
		10% reduction across products with saturated fat levels exceeding 6.5g per
		100 g

Partnership Food Category	Sub-category	Nutrient target (maximum)
Sausages	Sausages	Sodium
Minced meat, poultry or a combination of meat and poultry, encased in a skin, sold raw and requiring cooking before eating.	Fresh, chilled and frozen sausages and chipolatas, sold in raw form, made from beef, veal, lamb, kangaroo, chicken, turkey, pork or other meats. Raw	540mg per 100 g
Product must contain no less than 500g/kg of fat free meat flesh;	Polish sausage.	Saturated fat
and have a proportion of fat that is no more than 500g/kg of the fat free meat flesh content.		7g per 100 g
Savoury biscuits	Plain savoury crackers and biscuits	Sodium
Savoury biscuits, crackers or cakes which are shelf-stable and ready-to-eat.	Plain, savoury grain-based crackers and biscuits which are shelf-stable and ready-to-eat. Includes pepper varieties, but not those identified as salt flavoured	630mg per 100 g
	Plain corn, rice and other 'grain-cake' biscuits	Sodium
	Plain, savoury corn, quinoa or rice-based cakes which are shelf-stable and ready-to-eat.	270mg per 100 g
	Flavoured savoury biscuits, crackers and 'grain-cake' biscuits	Sodium
	Flavoured or salted savoury grain-based biscuits, crackers and cakes which are shelf-stable and ready-to-eat	720mg per 100 g
Savoury pastries	Dry pastries	Sodium
Meat, poultry and/or vegetable filling encased in a pastry.	Dry meat, vegetable or dairy filing encased in a pastry.	500mg per 100 g
		Saturated fat
		7g per 100 g

Partnership Food Category	Sub-category	Nutrient target (maximum)
	Wet Pastries Wet meat, vegetable or dairy filing encased in a pastry.	Sodium 400mg per 100 g Saturated fat7g per 100 g
Savoury snacks	Potato snacks	Sodium
Potato-, corn-, vegetable-, grain-based and extruded shelf-stable, ready-to-eat snacks sold in portioned or bulk packaging with or without flavouring.	Thin potato slices that are generally deep fried, and then flavoured (e.g. using salts, seasonings, herbs or spices), ready-to-eat snacks. Excludes salt and vinegar flavours.	500mg per 100 g
	Salt and vinegar snacks	Sodium
	All snack products salt & vinegar flavoured and sold as ready-to-eat. Includes potato-, corn-, rice-, vegetable-based snacks.	810mg per 100 g
	Extruded and pelleted snacks	Sodium
	Starch-rich materials (e.g. corn, maize, wheat, rice, potato flour) or legume flours that are generally transformed into "hot melt fluids" and then expanded or puffed via an extruder to form a ready-to-eat snack.	720mg per 100 g
	Vegetable, grains and other snacks	Sodium
	Vegetable matter (except potato) or cereal grains used to make a dough, which is then sheeted to thin, uniform dimensions and cut to form the snack and fried or baked. Sold as ready-to-eat.	450mg per 100 g

Partnership Food Category	Sub-category	Nutrient target (maximum)
Soups	Soups	Sodium
Savoury, primarily liquid dish, containing meat, poultry, fish, vegetables or other ingredients in stock or water. May be chilled or shelf-stable, ready for consumption or requiring reconstitution.	Chilled soups, ready-to-eat soups, frozen soups, dry packet soup mixes requiring reconstitution and canned soups. Target is per 100 g/ml of product for ready to serve soups; and per 100 g/ml of dry or condensed soups that have been made up / diluted in accordance with the on-pack instructions.	280mg per 100 g/ml
Sweet Bakery	Cakes, Muffins and Slices	Sodium
Freshly baked, frozen, shelf-stable or baking mixes of cakes, muffins and slices.	Freshly baked, frozen, shelf-stable or baking mixes of cakes, muffins and slices.	360mg per 100 g

References

Australian Bureau of Statistics, 2013. Australian Health Survey: biomedical results for nutrient, 2011-12. Retrieved from https://www.abs.gov.au/statistics/health/health-conditions-and-risks/australian-health-survey-biomedical-results-chronic-diseases/latest-release

Australian Bureau of Statistics, 2023a. Dietary Behaviour. Retrieved from https://www.abs.gov.au/statistics/health/health-conditions-and-risks/dietary-behaviour/latest-release

Australian Bureau of Statistics, 2023b. Healthy Food Partnership Reformulation Program: Wave 1, two-year progress. Retrieved from https://www.abs.gov.au/articles/healthy-food-partnership-reformulation-program-wave-1-two-year-progress

Australian Bureau of Statistics, 2024. Apparent Consumption of Selected Food Stuffs, Australia. Retrieved from https://www.abs.gov.au/statistics/health/health-conditions-and-risks/apparent-consumption-selected-foodstuffs-australia/latest-release#added-and-free-sugars

Healthy Food Partnership, 2020. Healthy Food Partnership Reformulation Program: Evidence Informing the Approach, Draft Targets and Modelling Outcomes, April 2020. Retrieved from https://www.health.gov.au/sites/default/files/documents/2021/04/partnership-reformulation-program-rationale-paper-food-reformulation-program-rationale-paper.pdf

World Health Organization, 2015. Guideline: Sugars intake for adults and children. Retrieved from https://www.who.int/publications/i/item/9789241549028