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Monitoring reformulation progress in priority food categories 2024

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Glossary

Term	Text
Best-ReMaP	Best practices in reformulation, marketing and procurement
CACF	commercially available complementary food
CLAS-IRE	Composition and Labelling Information System for Ireland
EC	European Commission
EDs	energy drinks
EFSA	European Food Safety Authority
EU	European Union
FRT	Food Reformulation Task Force
FSAI	Food Safety Authority of Ireland
g	gram
GNPD	Global New Products Database
GPAL	Public Analyst's Laboratory, Galway
INFID	Irish National Food Ingredient Database
IOI	island of Ireland
IQR	interquartile range
ml	millilitre
n	number of samples
NANS	National Adult Nutrition Survey
NCD	noncommunicable disease
NI	Northern Ireland
NPPM	nutrient and promotion profile model
OOH	out-of-home
PHE	Public Health England
PreventNCD	Prevent Non-Communicable Diseases

ROI	Republic of Ireland
RTEBC	ready-to-eat breakfast cereal
SD	standard deviation
SSBs	sugar-sweetened beverages
SSDT	Sugar-Sweetened Drinks Tax
UCD	University College Dublin
WHO	World Health Organization
UK	United Kingdom

1. Introduction

A significant role of the Food Reformulation Task Force (FRT) is to monitor progress in reducing energy (calories) and target nutrient (salt, saturated fat, and sugar) content in the 40 food categories prioritised for food reformulation in Ireland, as outlined in the *Food Reformulation Task Force: Priority Food Categories for Reformulation in Ireland* report (Food Safety Authority of Ireland, 2023a). The priority food categories for reformulation and the nutrients they are targeted for are provided in Table 68 in Appendix 1. The monitoring approach includes annual market snapshots, laboratory analysis and label verification studies. To complement this, the FRT accesses pre-existing and/or commercial data to examine trends in food nutrient content over time. In addition, the FRT regularly collaborates with academic institutes and research bodies to inform the work of the task force.

A description of the data used by the FRT for monitoring reformulation progress is provided in Table 1.

Table 1 Description of data used by the Food Reformulation Task Force to monitor reformulation progress

Data type	Description
Market snapshot	A market snapshot is a process by which food label and nutrition content information is collected for all food products in a food category available in supermarkets at a point in time. The food label information is collected in line with the Global Food Monitoring Initiative (Dunford *et al*., 2012). Permission is sought from leading supermarkets to collect data in store. Field workers collect data in store using the CLAS (Composition and Labelling Information System; a digital data collection tool) mobile phone application, which is licensed from the Institute of Nutrition, Slovenia (Pravst *et al*., 2021). When used by the FRT for market snapshots in Ireland, the tool is referred to as CLAS-IRE (Composition and Labelling Information System for Ireland). A time interval of 2–3 years is left between food label market snapshots for each food category. This approach is common practice in food reformulation monitoring programmes as it allows sufficient time for product formulation changes to be made and food product labels to be updated and printed. The nutrient content data of each food category are analysed per 100 g (as per information contained in the nutrient declaration on the label). In addition, as *A Roadmap for Food Product Reformulation in Ireland* states that portion size will be integrated into the methodology for measuring progress, the manufacturer suggested serving size on food labels is used as a proxy for portion size.
Mintel Global New Products Database (GNPD)	The Mintel GNPD tracks new products, such as food and drinks, launched in markets worldwide, including the Irish market. It provides detailed information about these products, such as their ingredients, nutrient content, claims and packaging.

	Mintel GNPD provides an information source to monitor the nutrient composition of new foods brought to market and is useful for tracking innovation only. The Mintel GNPD data collection methods and the sample sizes differ from those of the market snapshots. Given this, the trends in nutrient content of Mintel GNPD products compared to market snapshot products are only indicative, and this should be considered on interpretation of results.
Irish National Food Ingredient Database (INFID)	The INFID contains information on branded food products consumed by participants of the National Food Consumption Surveys undertaken by Irish Universities Nutrition Alliance (IUNA). Food products contained within INFID are the foods most commonly eaten by a representative group of the population in Ireland at a particular time. INFIDs are available for different population groups and can be used to show trends and to compare matched pair products across different years. Analysis of INFID data provides an insight into the nutrient content of the foods that were consumed by survey participants. This provides a picture of the nutrient changes in commonly consumed foods, as distinct from market snapshot analysis, which investigates all food products in a food category for sale on the market. Monitoring the nutrient content of food products in INFID provides a unique insight into the nutrient content of popular brand choices, by people living in Ireland. INFID has been made available to the task force by the Dietary Surveys Team at the Institute of Food and Health, University College Dublin (UCD). The FRT obtained access to INFID 4–7 datasets, which are described below. • INFID 4: Dataset collected as part of the National Pre-School Nutrition Survey. It contains information on 1,652 branded food products consumed by survey participants between 2011 and 2012 and across the 40 priority food categories. • INFID 5: Dataset collected as part of the National Children's Food Survey II. It contains information of 3,058 branded food products consumed by survey participants between 2017 and 2018 and across the 40 priority food categories. • INFID 6: Dataset collected as part of the National Teens' Food Survey II. It contains information on 2,026 branded food products consumed by survey participants between 2019 and 2020 and across the 40 priority food categories. • INFID 7: Dataset collected as part of the National Adult Nutrition Survey II. It contains information on 2,663 branded food products consumed by survey participants between 2021 and 2022 and across the 40 priority food categories. The FRT use the INFID data as it is provided.
Laboratory analysis	Laboratory analysis of nutrient content provides nutrient composition information for a sample of food products collected from a food category. Repeating this over time provides an information source for nutrient content trend analysis. Food products are sampled from the market and sent to Public Analyst's Laboratories (PALs) in Galway and Cork for nutrient composition analysis.
Nutrition declaration verification	Accurate nutrition declarations on food labels are relied on to truly monitor progress in reformulation. Using the results of the laboratory analysis conformance of food label nutrition declarations with European Commission (EC)

	Guideline Nutrition Labelling tolerance which set out the variability accepted for official controls purposes in relation to the measured nutritional content of a food sample in comparison to the declared nutrition content on the label of that food (European Commission, 2012).
Foodservice/ out-of-home (OOH) sector	There is a lack of declared nutrition information for foods sold in the foodservice/out-of-home (OOH) sector, which includes establishments where food and drink are prepared outside of the home for immediate consumption, e.g. restaurants, cafés, takeaways and public houses. To address this information gap, the task force completes food product sampling and laboratory analysis surveys for popular food items sold in the foodservice sector.
Research	The FRT regularly conducts, commissions or collaborates with academic institutions and research bodies on research related to reformulation in order to progress the work of the task force.

For the purposes of this report, the 40 priority food categories outlined in the *Food Reformulation Task Force: Priority Food Categories for Reformulation in Ireland* report (Food Safety Authority of Ireland, 2023a) have been classified into nine groups based on the category type. Where required, food categories have been subcategorised in order to complete in-depth analysis of nutrient trends. This report presents the results of the analysis of the various data types (outlined in Table 1) available for the priority food categories, and their subcategories, within these groupings.

A description of how the food categories are conveyed in this report is outlined in Table 2.

Table 2 A description of the food product groups conveyed in this report

Food product grouping title	Description
Food category	All products within a food category are reported together. Reporting at this level captures both food product reformulation and trends in food category innovation.
Food subcategory	Products within a food category which have similar characteristics are grouped and reported on at a subcategory level. This allows products which are alike within a category to be compared. This allows changes at a more granular level within a food category to be observed.
Matched pairs	Products available on the market at two different time points are compared against each other. This allows difference in the same product to be observed. In this report, matched pair analysis using INFID 5 and 6 is reported. Given that the timeframe between INFID 5 and 6 is only two years, the progress in reformulation between the two years (i.e. 2017 and 2019) will be limited. In addition, as INFID only contains the foods most commonly eaten by a representative group of the population in Ireland at a particular time, the matched pairs presented in this report are not representative of the overall Irish market.

The type of data collected and presented in this report for each of the 40 priority food categories, within the nine groups, is outlined in Table 3. Each group of priority food categories has a standalone chapter with subsections describing the results of the analysis of each data type available for that group.

This report will be updated as additional data and information becomes available.

Table 3 Type of data collected, and the year of collection, for each of the priority food categories*

Priority food category	Market snapshot	INFID trends	INFID matched pairs	Mintel GNPD	Laboratory analysis & label verification	Foodservice/ OOH sector	Research
Beverages							
Alternatives to milk & milks-based beverages	✓ (2021)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Carbonated beverages	✓ (2021, 2022)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)	✓ (2022)	✓ (2023)		✓ (2024)
Fruit juices & smoothies	✓ (2021)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Other beverages	✓ (2021)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Squashes, cordials & fruit juice drinks	✓ (2021)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Confectionery, Snacks and Desserts							
Biscuits including crackers	✓ (2022)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)	✓ (2022)			
Cakes, pastries & buns	✓ (2022)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)	✓ (2022)			

Chocolate confectionery	✓ (2022)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)	✓ (2022)			
Desserts	✓ (2021)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Ice-creams		✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Non-chocolate confectionery	✓ (2022)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)	✓ (2022)			
Rice puddings & custard		✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Savoury snacks	✓ (2021)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)	✓ (2022)	✓ (2021)		
Sugars, syrups, preserves & sweeteners		✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Cheeses and Yoghurts							
Cheeses	✓ (2023)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)	✓ (2023)	✓ (2023)		
Yoghurts	✓ (2016, 2021)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				✓ (2024)
Fats and Spreads							

Butter (over 80% fat)		✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Other fat spreads (40-80% fat)		✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Cereals and Breads							
Ready to eat breakfast cereals	✓ (2016, 2021)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				✓ (2024)
Other breakfast cereals	✓ (2016, 2021)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
White sliced bread & rolls	✓ (2021)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)		✓ (2022)		
Wholemeal & brown bread & rolls	✓ (2021)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)		✓ (2022)		
Other breads	✓ (2021)	✓ (2011, 2017, 2019, 2021)			✓ (2022)		
Vegetable, Potato and Savoury Products							
Chipped, fried & roasted potatoes		✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Peas, beans & lentils		✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				

Processed potato products		✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Savouries	✓ (2023)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)	✓ (2023)	✓ (2023)	✓ (2023)	
Vegetable & pulse dishes		✓ (2011, 2017, 2019, 2021)					
Meat and Fish							
Bacon & ham	✓ (2021)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Beef & veal	✓ (2021)	✓ (2011, 2017, 2019, 2021)					
Chicken, turkey & game	✓ (2021)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Fish & fish products		✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Meat Based Products and Convenience Foods							
Beef & veal ready meals		✓ (2011, 2017, 2019, 2021)					
Burgers		✓ (2011, 2017, 2019, 2021)					

Meat pies & pastries		✓ (2011, 2017, 2019, 2021)					
Meat products		✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Poultry & game ready meals		✓ (2011, 2017, 2019, 2021)					
Sausages	✓ (2021)	✓ (2011, 2017, 2019, 2021)					
Other Products							
Nuts & seeds, herbs & spices		✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)				
Soups, sauces & miscellaneous foods	✓ (2023)	✓ (2011, 2017, 2019, 2021)	✓ (2017, 2019)	✓ (2023)	✓ (2022)		

* This table does not include categories sampled as part of the Salt Reduction Programme since 2003. These categories are outlined in the *Monitoring Sodium and Potassium in Processed Foods (September 2003 to December 2023)* report.

2. Purpose

The purpose of this report is to communicate changes in the nutrient content of food products within the priority food categories on the Irish market between 2015 and 2023, using the mosaic of data available to the FRT (as described in Table 1).

3. Beverage priority food categories

The priority food categories grouped into beverages are as follows:

1. Alternatives to milk and milk-based beverages
2. Carbonated beverages
3. Fruit juices and smoothies
4. Other beverages
5. Squashes, cordials and fruit juice drinks.

No foodservice/OOH sector analysis has been undertaken in the beverage priority food categories.

3.1 Market snapshots

In 2021, market snapshots were carried out for the five beverage priority food categories. The nutrient content of these were reported in *The Food Reformulation Task Force Progress Report 2023* (Food Safety Authority of Ireland, 2024b) and can be found in Appendix 2. The five beverage priority food categories were included in a 2024 market snapshot and the changes in the nutrient content of these categories between 2021 and 2024 will be reported in the 2025 progress report.

In 2022, nutrition declaration and food label information were collected for 133 sugar-sweetened carbonated beverages. Sugar-sweetened carbonated beverages are prioritised for the reduction of sugar (20%). The sugar content per 100 ml is shown in Table 4.

Table 4 Sugar content (per 100 ml) of the sugar-sweetened carbonated beverages food subcategory in 2022

Food subcategory	Statistic	Sugar (g)
Sugar-sweetened carbonated beverages (n=133)	mean (SD)	6.81 (3.60)
	median (IQR)	4.70 (6.10)
	min-max	0.80–14

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

All but one of the sugar-sweetened carbonated beverages (99.2%) provided a suggested serving size, ranging from 100 ml to 750 ml. The sugar content per suggested serving size is shown in Table 5.

Table 5 Sugar content (per suggested serving size) of the sugar-sweetened carbonated beverages food subcategory in 2022

Food subcategory	Statistic	Sugar (g)
Sugar-sweetened carbonated beverages (n=132)	mean (SD)	22.82 (14.71)
	median (IQR)	17.05 (20.88)
	min-max	2–70

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

3.2 Mintel Global New Products Database

The Mintel Global New Products Database (GNPD) (Mintel Group Ltd, 2024) was used to assess the nutrient content of new products placed on the Irish market within priority food categories collected in market snapshots.

As sugar-sweetened carbonated beverages were collected in the 2022 market snapshot, the median nutrient content of the products collected were compared to the median nutrient content of the new sugar-sweetened carbonated beverage products placed on the Irish market in 2022.

There were 133 sugar-sweetened carbonated beverages products collected in the 2022 market snapshot and just 32 new sugar-sweetened carbonated beverages products placed on the Irish market in 2022 according to the Mintel GNPD. There was a minimal difference in the median sugar content (per 100 ml) of the sugar-sweetened carbonated beverages products collected in the market snapshot (4.70 g/100 ml) compared to those identified by the Mintel GNPD (4.45 g/100 ml).

The Mintel GNPD was also used to assess the median sugar content of sugar-sweetened carbonated beverages between 2015 and 2023. This analysis showed a decline in sugar content between 2016 and 2018. From 2018 to 2023 the sugar content appears to have plateaued. Given that the Sugar-Sweetened Drinks Tax (SSDT) was introduced in Ireland in 2018 and that in 2024 the Department of Health published the *Evaluation of Ireland's Sugar-Sweetened Drinks' Tax (SSDT)* (Houghton, Moran Stritch and Auerbach, 2024), the FRT further investigated this plateau in the sugar content in new sugar-sweetened carbonated beverages placed on the Irish market between 2015 and 2023. During this period, the number of new products placed on the Irish market ranged from 13 to 41. As outlined in Figure 1, the sugar content of new sugar-sweetened carbonated beverages (per 100 ml) placed on the market has declined notably from a median of 9.3 g/100 ml in 2016 to 4.8

g/100 ml in 2018, when the SSDT was introduced. Since 2018, a gradual decline in the sugar content to 4.1 g/100 ml in 2023 can be seen. These results suggest that the introduction of the SSDT is likely to have resulted in a reduction in the sugar content of new sugar-sweetened carbonated beverages placed on the Irish market since 2018.

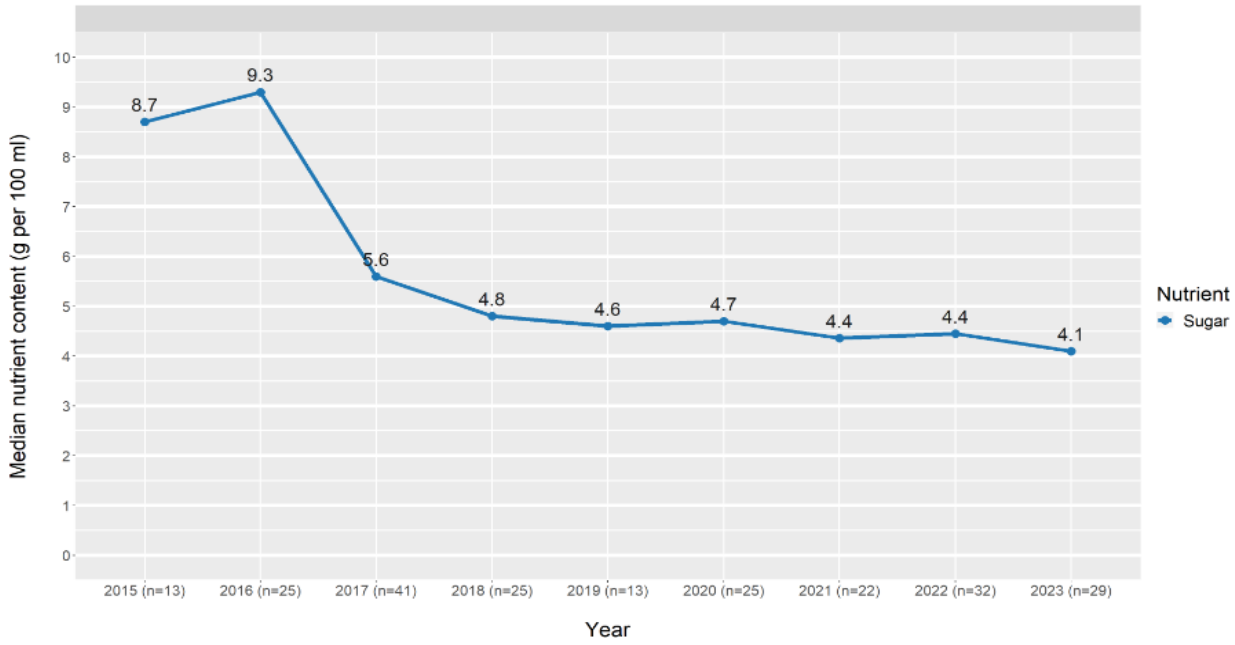
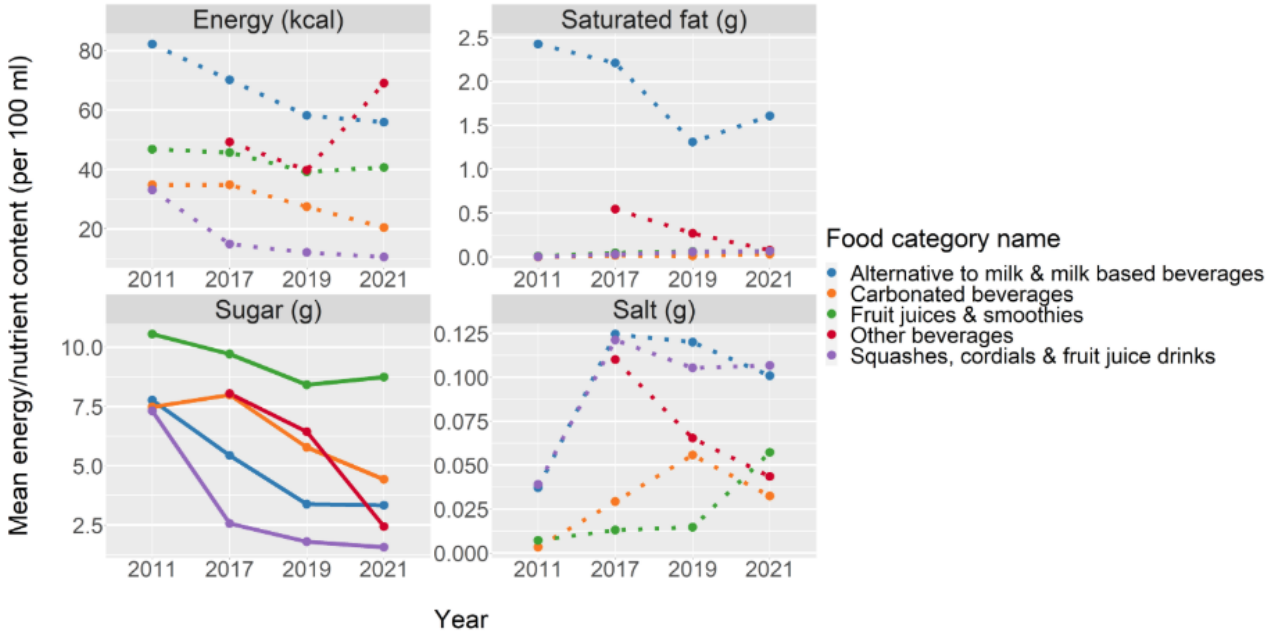


Figure 1 Trend of the median sugar content (g per 100 ml) of sugar-sweetened carbonated beverages identified by Mintel GNPD between 2015 and 2023

3.3 The Irish National Food Ingredient Database

The Irish National Food Ingredient Database (INFID) has been used to determine trends in nutrient content across the priority food categories for food reformulation. Trends in energy (calories), saturated fat (g), sugar (g) and salt (g) per 100 ml, are shown for the beverage priority food categories. Trends are indicative and should be interpreted cautiously given that INFIDs 4, 5, 6 and 7 were collected as part of surveys of different population subgroups (see Table 1).

There was a trend towards a decline in the sugar content of the beverage priority food categories between 2011 and 2021. This is shown in Figure 2.



Note: Food categories represented with an unbroken line are prioritised for reformulation of the target nutrient, while food categories represented with a broken line are not prioritised for reformulation of the target nutrient.

Figure 2 Energy (calories) and sugar content trend graph per 100 ml of beverage priority food categories between 2011 and 2021, based on INFID 4–7

Matched pair analysis using the INFID datasets provides an in-depth examination of the nutrient content of the same food product within a priority food category, over time. A detailed examination of the INFID 5 and 6 databases was carried out to identify matched pairs (matched pairs are the exact same products on the market in both years, the matching was completed using product name, manufacturer name and net weight) within the beverage priority food categories.

The nutrient content and percentage differences in the median energy (calories) and nutrient content of the beverage priority food categories, between 2017 and 2019, are presented in Table 6. As the number of matched pairs identified in some of the priority food categories was small, differences in the median energy (calories), saturated fat (g), sugar (g) and salt (g) content per 100 g between the matched pairs were analysed.

Table 6 Nutrient content and percentage change in the median sugar content (per 100 ml) of beverage matched product pairs between 2017 and 2019

Priority food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Alternative to milk and milk-based beverages (n=7)	**2017**				
	mean (SD)	90 (72.67)	3.17 (5.68)	**3.93 (3.40)**	0.14 (0.07)
	median (IQR)	64 (76.50)	0.80 (1.70)	**2.50 (3.25)**	0.13 (0.04)
	min-max	13–210	0.10–15.90	**0–10.30**	0.08–0.30
	2019				
	mean (SD)	90.14 (72.49)	3.16 (5.69)	**3.90 (3.38)**	0.15 (0.07)
	median (IQR)	64 (76)	0.80 (1.75)	**2.50 (3.15)**	0.13 (0.04)
	min-max	13–210	0.10–15.90	**0–10.30**	0.08–0.30
	% change (kcal or g)	0 (0)	0 (0)	**0 (0)**	0 (0)
Carbonated beverages (n=14)	**2017**				
	mean (SD)	32.93 (14.29)	0.02 (0.04)	**7.24 (4.02)**	0.03 (0.04)
	median (IQR)	33.50 (18)	0 (0)	**6.30 (6.25)**	0.01 (0.05)
	min-max	1–54	0–0.10	**0–13**	0–0.13
	2019				
	mean (SD)	26.21 (13.95)	0.02 (0.04)	**5.40 (3.26)**	0.03 (0.04)
	median (IQR)	21.50 (14.25)	0 (0)	**4.70 (0.40)**	0.01 (0.02)
	min-max	1–54	0–0.10	**0.10–13**	0–0.13
	% change (kcal or g)	-35.82 (-12)	0 (0)	**-25.40 (-1.60)**	0 (0)
Fruit juices and smoothies (n=19)	**2017**				
	mean (SD)	43.11 (6.98)	0.06 (0.05)	**9.26 (1.68)**	0.02 (0.03)
	median (IQR)	44 (4)	0.10 (0.10)	**9.80 (2.25)**	0.01 (0.01)
	min-max	20–53	0–0.10	**4.80–12.10**	0–0.10
	2019				
	mean (SD)	42.16 (6.51)	0.05 (0.05)	**9.23 (1.49)**	0.01 (0.02)
	median (IQR)	43 (4)	0.10 (0.10)	**9.80 (1.45)**	0.01 (0.01)
	min-max	20–52	0–0.10	**4.80–11**	0–0.08
	% change (kcal or g)	-2.27 (-1)	0 (0)	**0 (0)**	0 (0)
Other beverages (n=10)	**2017**				
	mean (SD)	42 (125.93)	0.42 (1.33)	**7.71 (22.81)**	0.07 (0.23)
	median (IQR)	0 (0.75)	0 (0)	**0 (0)**	0 (0.01)
	min-max	0–400	0–4.20	**0–72.50**	0–0.73
	2019				
	mean (SD)	41.3 (126.78)	0.41 (1.30)	**7.53 (23.02)**	0.05 (0.12)
	median (IQR)	0 (0.75)	0 (0)	**0 (0)**	0 (0.01)
	min-max	0–402	0–4.10	**0–73**	0–0.38
	% change (kcal or g)	0 (0)	0 (0)	**0 (0)**	0 (0)
Squashes, cordials and fruit juice drinks (n=14)	**2017**				
	mean (SD)	13.71 (13.52)	0.01 (0.04)	**2.36 (3.27)**	0.08 (0.08)
	median (IQR)	10.50 (17.75)	0 (0)	**1 (3.65)**	0.04 (0.05)
	min-max	1–51	0–0.10	**0–12**	0–0.23
	2019				

	mean (SD)	13.43 (13.96)	0.01 (0.04)	**2.26 (3.33)**	0.07 (0.07)
	median (IQR)	10 (18.50)	0 (0)	**0.80 (3.85)**	0.04 (0.04)
	min-max	1–51	0–0.10	**0–12**	0–0.23
	% change (kcal or g)	-4.76 (-0.50)	0 (0)	**-20 (-0.20)**	0 (0)

The nutrients targeted for reformulation in each food category are in bold text.
SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum.

Between 2017 and 2019, changes in the sugar content per 100 ml were observed across different beverage categories as follows:

- For the alternative to milk and milk-based beverages matched pairs there was no change in the sugar content per 100 ml
- For the sugar-sweetened carbonated beverages matched pairs there was a 25.40% (1.60 g) reduction in the sugar content per 100 ml
- For the fruit juices and smoothies and other beverages matched pairs there was no change in the sugar content per 100 ml
- For the other beverages matched pairs there was no change in the sugar content per 100 ml
- For the squashes, cordials and fruit juice drinks matched pairs there was a 20% (0.20 g) reduction in the sugar content per 100 ml.

Overall, the reduction in the sugar content in products that remained on the market in 2017 and 2019 in two beverage priority food categories is positive. However, continued reformulation efforts are needed by the food industry for the remaining beverage priority food categories.

A visual summary of percentage changes in median nutrient content of the matched pairs in all the priority food categories in 2017 and 2019 are provided in Appendix 3.

3.4 Laboratory analysis and nutrition declaration verification

In 2023, a convenience sample of 95 sugar-sweetened carbonated beverages, which included cola, citrus and fruit flavoured carbonated beverages, energy drinks and tonics, was collected from the Irish market and analysed for sugar (total sugar, monosaccharides, and disaccharides) content. Samples were collected from a range of supermarkets and convenience retail stores in County Dublin, within the locality of the sampling officers and the Dublin 1 area. Samples were sent to the Public Analyst's Laboratory, Galway (GPAL) for analysis (Irish National Accreditation Board Registration Number: 009T).

In addition, nutrition declaration verification analysis was undertaken in relation to sugar. The EC guideline nutrition labelling tolerances for sugar are defined as a tolerance of ± 2 g if the product contains <10 g of sugar per 100 g, and a tolerance of ± 20% if the product contains 10–40 g of sugar per 100 g (European Commission, 2012). This analysis involved using a Nutrition Tolerance Calculator built by the FSAI in Microsoft Excel.

3.4.1 Laboratory analysis results

The mean total sugar content was 5.09 g per 100 ml. The majority (80%) of products sampled provided a suggested serving size on the label, with an average suggested serving size of 296.30 ml. The mean total sugar content per suggested serving size was 15.45 g, which is equivalent to 3.9 teaspoons of sugar. The results of this sampling are outlined in Table 7 and Table 8.

Additional details on this analysis can be found in *Food Reformulation Task Force: Monitoring Sugar in Processed Foods (July 2022 to June 2023)* (Food Safety Authority of Ireland, 2024d).

Table 7 Sugar content (monosaccharides, disaccharides, and total sugar) of sugar-sweetened carbonated beverages per 100 ml (g/100 ml) in 2023

Sugars in sugar-sweetened carbonated beverages per 100 ml[(a)]	Year: 2023				
	Monosaccharides		Disaccharides		Total sugar
	Glucose	Fructose	Sucrose	Maltose	
Mean (SD)	1.33 (1.10)	1.11 (0.92)	2.56 (1.98)	0.44 (0.73)	5.09 (2.39)
Median (IQR)	1.01 (1.46)	0.82 (1.12)	2.37 (2.43)	0.03 (0.30)	4.70 (0.90)
Min–max	0.03–4.92	0.03–5.01	0.03–12.70	0.03–1.93	1.50–14
Total samples (n)	95	95	95	19	95

[(a)] Unless otherwise indicated, all samples were analysed as sold. Sugar-sweetened carbonated beverages included in this sample were cola, fruit and citrus flavoured, energy drinks and tonics.
SD, standard deviation; IQR, interquartile range; min–max, minimum and maximum.

Table 8 Sugar content (monosaccharides, disaccharides and total sugar) of sugar-sweetened carbonated beverages per suggested serving size (g/suggested serving size) in 2023

Sugars in sugar-sweetened carbonated beverages per suggested serving size[(a)]	Year: 2023				
	Monosaccharides		Disaccharides		Total sugar
	Glucose	Fructose	Sucrose	Maltose	
Mean (SD)	3.90 (4.33)	3.10 (2.97)	8.14 (9.01)	1.86 (2.67)	15.45 (12.16)
Median (IQR)	2.21 (4.33)	1.86 (2.95)	7.31 (5.14)	0.25 (3.35)	11.75 (2.98)
Min–max	0.08–24.60	0.08–12.53	0.08–63.50	0.08–7.33	4–70
Total samples (n)	76	76	76	14	76

[(a)] Unless otherwise indicated, all samples were analysed as sold. Sugar-sweetened carbonated beverages included in this sample were cola, fruit and citrus flavoured, energy drinks and tonics. Mean suggested serving size for sugar-sweetened carbonated beverages was 296.30 ml with a minimum of 250 ml and a maximum of 500 ml. Sugar-sweetened carbonated beverages (n=76) with suggested serving size recommendations were included. Nineteen sugar-sweetened carbonated beverages were excluded due to no suggested serving size present on the food label.
SD, standard deviation; IQR, interquartile range; min–max, minimum and maximum.

3.4.2 Nutrition declaration verification

Of the 95 sugar-sweetened carbonated beverages sampled, 2.1% (n=4) made a nutrition claim related to sugar (n=2 made a “low sugar” claim; n=2 made a “reduced sugar” claim).

The conformance of the laboratory-analysed sugar content of sugar-sweetened carbonated beverages with the EC guideline nutrition labelling tolerances was assessed. Of the sugar-sweetened carbonated beverages analysed, 99.9% (n=94) were within the EC guideline nutrition labelling tolerances for sugar. One sugar-sweetened carbonated beverage was non-conformant, whereby the analysed sugar content was below the lower tolerance range. This was raised at the sugar-sweetened carbonated beverage category meeting in 2024. The trend in nutrition labelling tolerances for sugar, sub-categorised by the type of nutrition claim made on the beverage, is outlined in Figure 3.

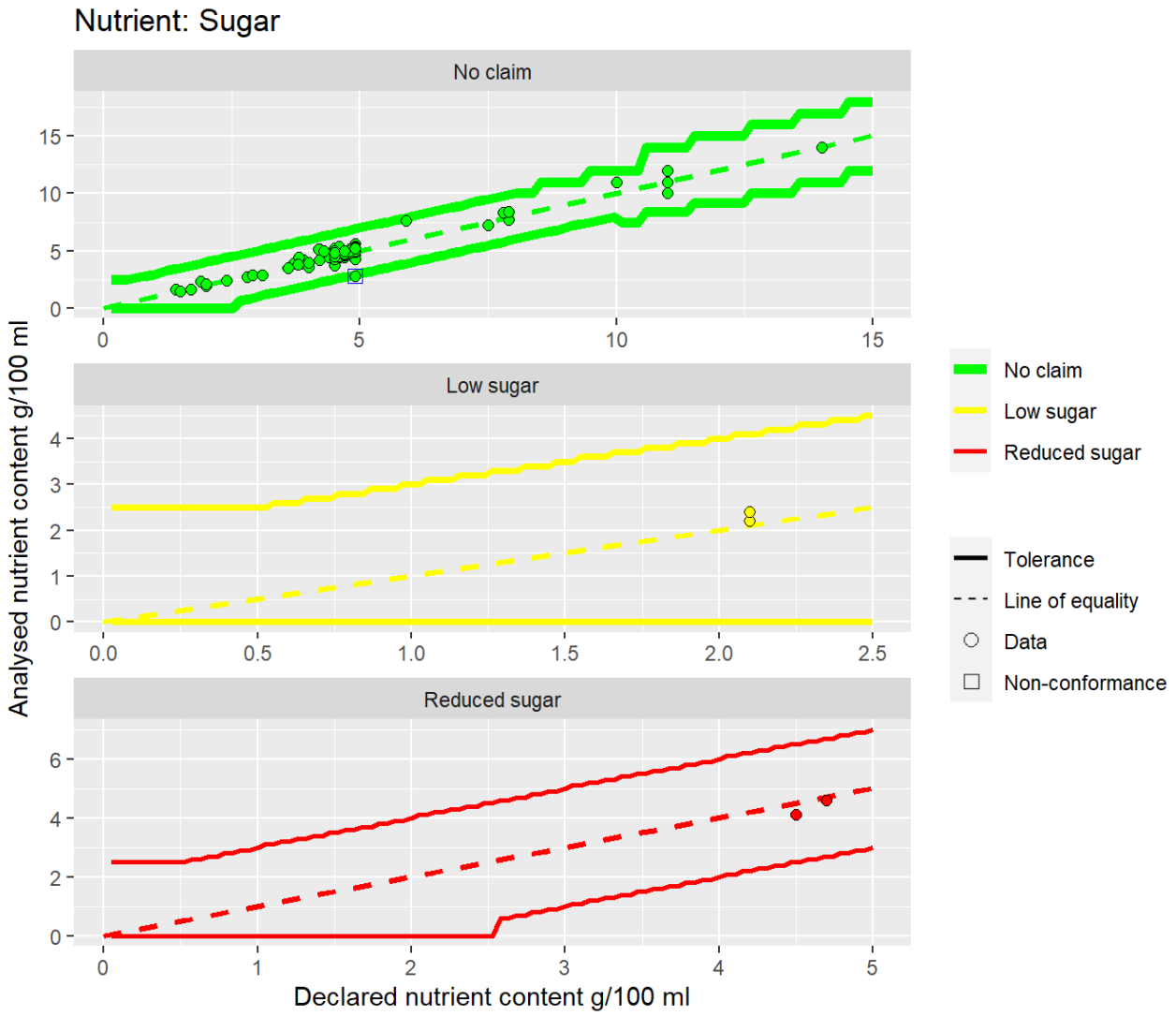


Figure 3 Trend in sugar nutrition labelling tolerances for sugar-sweetened carbonated beverages

As only 1.1% (n=1) sugar-sweetened carbonated beverage was outside EC guideline nutrition labelling tolerances for sugar, this survey indicates that there was no systemic under or over declaration of sugar content on the product labels. Therefore, declared nutrition labels provide a reliable source of information for sugar monitoring in sugar-sweetened carbonated beverages and may accurately reflect changes in the nutrient content of food products over time and reflect the true food reformulation efforts.

Additional information of this analysis can be found in *The Accuracy of Nutrition Declarations on the Labels of Sugar-Sweetened Carbonated Beverages and Processed Cheeses Sampled in 2023* (Food Safety Authority of Ireland, 2024a).

3.5 Research

Based on the work outlined in section 3.4, a scientific abstract titled *Benchmarking the Sugar and Caffeine Content of Carbonated Sugar–Sweetened Beverages and Energy Drinks on the Irish Market in 2023* was developed and presented as a poster at The Nutrition Society Congress in Belfast in July 2024 (McCann *et al*., 2024). The abstract is included here.

Background

Over consumption of sugar-sweetened beverages (SSBs) is associated with an increased risk of weight gain and dietary related noncommunicable diseases (Malik and Hu, 2022). Consumption of energy drinks (EDs) by children and adolescents is linked to poor health and social outcomes (Ajibo *et al*., 2024). To address high sugar content in beverages in Ireland, the SSDT was introduced in 2018 and applies to SSBs, including EDs, with a sugar content of 5 g/100 ml or more (Revenue, 2018). SSBs and EDs are also prioritised for sugar reduction in the Irish reformulation strategy (Food Safety Authority of Ireland, 2023a).

Aim

The aim of this study was to examine the mean analysed sugar (g) content of carbonated SSBs and EDs on the Irish market in 2023 against the Irish SSDT differential rate thresholds. A secondary aim was to determine a 2023 benchmark for the mean labelled caffeine (mg) content of EDs.

Methods

A convenience sample of SSBs (n=67) and EDs (n=28) were collected from Dublin-based supermarkets in 2023. Samples were sent to the Public Analyst Laboratory, Galway for sugar analysis, using high–performance anion-exchange chromatography/pulsed amperometric detection. The mean, standard deviation (SD), minimum and maximum (min-max) analysed sugar (g) per 100 ml and per suggested serving size were determined and assessed against the SSDT lower rate of 5–7.99 g/100 ml and upper rate of >8 g/100 ml. The mean, SD and min-max labelled caffeine (mg) content per serving of EDs containing caffeine (n=18) was determined. Statistical analysis was completed using RStudio v4.3.0.

Results

The mean analysed sugar (g) of SSBs (n=67) and EDs (n=28) was 4.48 g/100 ml (SD 1.53; min-max 1.6 g–10.7 g) and 6.56 g/100 ml (SD 3.31; min-max 1.5 g–14 g), respectively. In SSBs (n=54) and EDs (n=22) that provided a suggested serving size, the mean analysed sugar (g) was 11.17 g per serving (SD 3.75; min-max 4 g–26.75 g) and 25.93 g per serving (SD 18.17; min-max 9.75 g–70 g), respectively. In this sample 31% (n=21) of SSBs and 50% (n=14) of EDs had a sugar (g) content above the taxable rate. Of these, 10% (n=2) of SSBs and 64% (n=9) of EDs were above the SSDT

upper taxable rate. Caffeine containing EDs (n=18) had a mean labelled caffeine (mg) content of 129.17 mg per serving (SD 39.38; min-max 70 mg–160 mg).

Conclusion

The majority of carbonated SSBs in this sample were below the SSDT lower differential threshold. However, the majority of EDs had a high sugar content and were liable for SSDT at the higher rate. These findings agree with a 2019 study and show EDs remain high in sugar and caffeine (Safefood, 2019). Given their association with poor health outcomes in children and adolescents, EDs on the Irish market require additional reformulation to meet sugar reduction targets (Ajibo *et al*., 2024).

4. Confectionery, snacks and desserts priority food categories

The priority food categories grouped into confectionery, snacks and desserts are as follows:

1. Biscuits including crackers
2. Cakes, pastries and buns
3. Chocolate confectionery
4. Desserts
5. Ice-creams
6. Non-chocolate confectionery
7. Rice puddings and custard
8. Savoury snacks
9. Sugars, syrups, preserves and sweeteners.

No laboratory analysis and nutrition declaration verification analysis, foodservice/OOH sector analysis or research has been undertaken in the confectionery, snacks and desserts priority food categories. This will be addressed in future work of the task force.

4.1 Market snapshots

In 2021, market snapshots were carried out for the desserts priority food category within this group. The nutrient content of these products were reported in *The Food Reformulation Task Force Progress Report 2023* (Food Safety Authority of Ireland, 2024b) and can be found in Appendix 2. Desserts were included in a 2024 market snapshot and the changes in their nutrient content between 2021 and 2024 will be reported in the 2025 progress report.

In 2022, savoury snacks, non-chocolate confectionery, chocolate confectionery, cakes, pastries and buns, and a subcategory of the biscuits including crackers category, sweet biscuits, were included in a market snapshot and these results are outlined in this section.

4.1.1 Savoury snacks

In 2022, nutrition declaration and food label information were collected for 298 savoury snack products. Savoury snack products are prioritised for the reduction of energy (calories) (20%) and salt (10%). The energy (calories) and salt content per 100 g is shown in Table 9.

Table 9 Energy (calories) and salt content (per 100 g) of the savoury snacks food category in 2022

Food category	Statistic	Energy (kcal)	Salt (g)
Savoury snacks (n=298)	mean (SD)	489.72 (43.81)	1.70 (0.72)
	median (IQR)	502.15 (49.83)	1.50 (0.70)
	min-max	311.90–584.61	0.01–5.70

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the savoury snacks category, 96.6% provided a suggested serving size, ranging from 12 g to 100 g. The energy (calories) and salt per suggested serving size is shown in Table 10.

Table 10 Energy (calories) and salt content (per suggested serving size) of the savoury snacks food category in 2022

Food category	Statistic	Energy (kcal)	Salt (g)
Savoury snacks (n=288)	mean (SD)	141.74 (49.52)	0.49 (0.30)
	median (IQR)	131.12 (46.48)	0.43 (0.23)
	min-max	60.89–488.77	0–3.24

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

4.1.2 Non-chocolate confectionery

In 2022, nutrition declaration and food label information were collected for 164 non-chocolate confectionery products. Non-chocolate confectionery products are prioritised for the reduction of sugar (20%). The sugar content per 100 g is shown in Table 11.

Table 11 Sugar content (per 100 g) of the non-chocolate confectionery food category in 2022

Food category	Statistic	Sugar (g)
Non-chocolate confectionery (n=164)	mean (SD)	58.71 (11.49)
	median (IQR)	58.30 (14.50)
	min-max	18–93.20

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the non-chocolate confectionery category, 63.4% provided a suggested serving size, ranging from 6 g to 50 g. The sugar content per suggested serving size is shown in Table 12.

Table 12 Sugar content (per suggested serving size) of the non-chocolate confectionery food category in 2022

Food category	Statistic	Sugar (g)
Non-chocolate confectionery (n=104)	mean (SD)	14.89 (7.52)
	median (IQR)	13.68 (5.99)
	min-max	3.62–38.43

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

4.1.3 Chocolate confectionery

In 2022, nutrition declaration and food label information were collected for 795 chocolate confectionery products. Chocolate confectionery products are prioritised for the reduction of energy (calories) (20%), saturated fat (10%) and sugar (20%). The energy (calories), saturated fat and sugar content per 100 g is shown in Table 13.

Table 13 Energy (calories), saturated fat and sugar content (per 100 g) of the chocolate confectionery food category in 2022

Food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)
Chocolate confectionery (n=795)	mean (SD)	524.77 (45.03)	17.50 (5.31)	50.56 (9.25)
	median (IQR)	532.27 (47.68)	17.70 (5.80)	52 (10.10)
	min-max	238.77–642.45	3.70–52.80	1–79

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the chocolate confectionery category, 70.0% provided a suggested serving size, ranging from 4 g to 65 g. The energy (calorie), saturated fat and sugar content per suggested serving size is shown in Table 14.

Table 14 Energy (calories), saturated fat and sugar content (per suggested serving size) of the chocolate confectionery food category in 2022

Food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)
Chocolate confectionery (n=556)	mean (SD)	139.51 (53.27)	4.51 (1.97)	13.71 (6.20)
	median (IQR)	133.54 (73.93)	4.26 (2.24)	13.29 (8.03)
	min-max	21.41–352.19	0.60–12.92	1.68–39.84

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

4.1.4 Cakes, pastries and buns

In 2022, nutrition declaration and food label information were collected for 182 cakes, pastries and buns. Cakes, pastries and buns are prioritised for the reduction of energy (calories) (20%), saturated fat (10%), sugar (20%) and salt (10%). The energy (calories), saturated fat, sugar and salt content per 100 g is shown in Table 15.

Table 15 Energy (calories), saturated fat, sugar and salt content (per 100 g) of the cakes, pastries and buns food category in 2022

Food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Cakes, pastries and buns (n=182)	mean (SD)	406.03 (57.39)	6.42 (4.54)	33.61 (13.78)	0.55 (0.29)
	median (IQR)	408.70 (78.39)	5.40 (5.63)	33.25 (11.65)	0.50 (0.44)
	min-max	270.08–542.78	0.10–23	9.10–94.40	0.02–1.70

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the cakes, pastries and buns category, 85.7% provided a suggested serving size, ranging from 13 g to 125 g. The energy (calories), saturated fat, sugar and salt content per suggested serving size is shown in Table 16.

Table 16 Energy (calories), saturated fat, sugar and salt content (per suggested serving size) of the cakes, pastries and buns food category in 2022

Food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Cakes, pastries and buns (n=156)	mean (SD)	187.12 (88.87)	2.77 (2.03)	15.28 (9.95)	0.26 (0.20)
	median (IQR)	169.80 (91.12)	2.33 (2.53)	13.21 (10.64)	0.25 (0.24)
	min-max	51.73–444.67	0.01–9.76	3.68–63.75	0.02–1.19

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

4.1.5 Sweet biscuits

In 2022, nutrition declaration and food label information were collected for 180 sweet biscuits. Sweet biscuits, which is a subcategory of the biscuits including crackers category, is prioritised for the reduction of energy (calories) (20%), saturated fat (10%), sugar (20%) and salt (10%). The energy (calories), saturated fat, sugar and salt content per 100 g is shown in Table 17.

Table 17 Energy (calories), saturated fat, sugar and salt content (per 100 g) of the sweet biscuits subcategory in 2022

Food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Sweet biscuits (n=180)	mean (SD)	478.73 (54.01)	11.26 (4.15)	31.74 (9.43)	0.55 (0.24)
	median (IQR)	487.33 (40.58)	11.45 (4.15)	33 (10)	0.55 (0.38)
	min-max	85.80–561.19	1.20–24	1.10–52	0.04–1.30

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the sweet biscuits subcategory, 87.2% provided a suggested serving size, ranging from 8 g to 45 g. The energy (calories), saturated fat, sugar and salt content per suggested serving size is shown in Table 18.

Table 18 Energy (calories), saturated fat, sugar and salt content (per suggested serving size) of the sweet biscuits subcategory in 2022

Food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Sweet biscuits (n=157)	mean (SD)	91.61 (40.42)	2.26 (1.36)	6.21 (3.31)	0.10 (0.08)
	median (IQR)	84.39 (44.57)	2.09 (1.50)	5.50 (4.64)	0.09 (0.06)
	min-max	12.87–222.10	0.10–7.33	0.50–16.65	0.01–0.54

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

4.2 Mintel Global New Products Database

The Mintel Global New Products Database (GNPD) (Mintel Group Ltd, 2024) was used to assess the nutrient content of new products placed on the Irish market within priority food categories collected in market snapshots.

The median nutrient content of the products within the five priority food categories collected in the 2022 market snapshot were compared to the median nutrient content of new products in the same five categories placed on the Irish market in 2022.

The number of products collected within each food category in the 2022 market snapshot were considerably higher than the number of Mintel GNPD products captured in 2022 (see Table 19) in the same categories. This was to be expected given that Mintel GNPD only captures new products placed on the market.

Table 19 Number of products with all target nutrients within each food category captured in the market snapshot and by Mintel GNPD in 2022

Food category/subcategory	Market snapshot	Mintel GNPD
Savoury snacks	298	31
Non-chocolate confectionery	164	30
Chocolate confectionery	795	116
Cakes, pastries and buns	182	80
Sweet biscuits	180	77

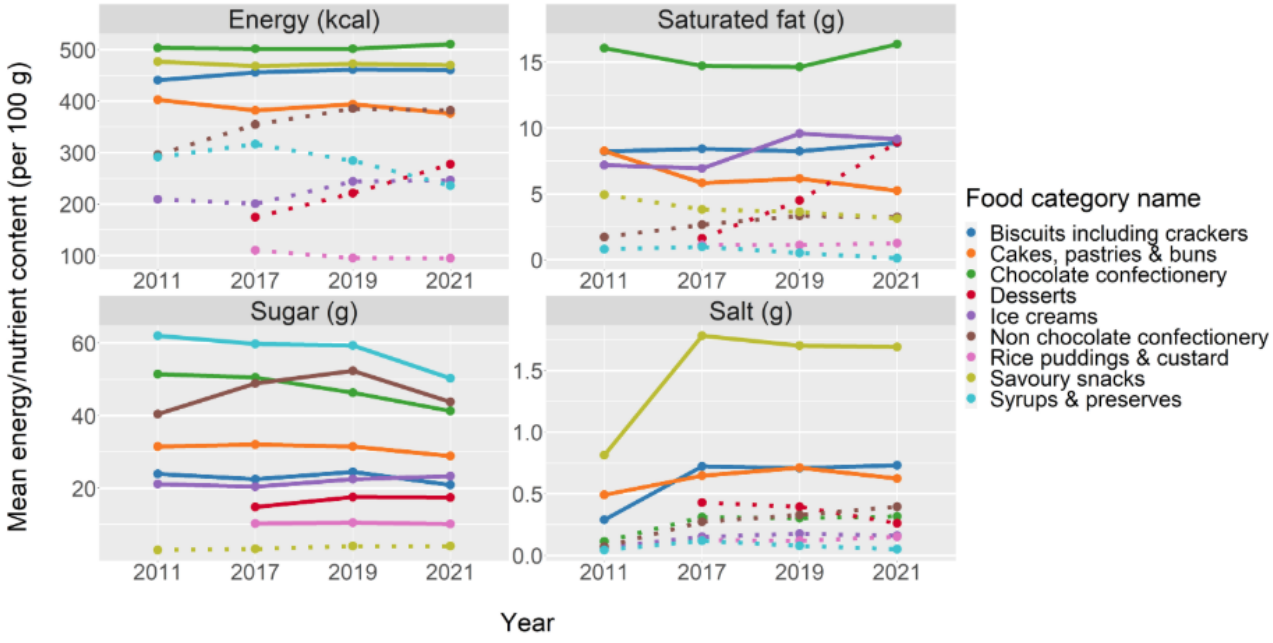
In comparison to the products captured in the market snapshot, the products identified by Mintel GNPD showed:

- A trend towards higher saturated fat content of the sweet biscuits (13.30 g/100g in Mintel GNPD vs 11.26 g/100g in market snapshot), and cakes, pastries and buns food categories (8.33 g/100g in Mintel GNPD vs. 5.40 g/100g in market snapshot)
- A trend towards lower sugar content of chocolate confectionery (49 g/100g in Mintel GNPD vs 52 g/100g in market snapshot) and non-chocolate confectionery (54.50 g/100g in Mintel GNPD vs 58.30 g/100g in market snapshot), but a slight increase in the sugar content of cakes, pastries and buns (39 g/100g in Mintel GNPD vs 33.25 g/100g in market snapshot)
- A trend towards lower salt content of savoury snacks (1.30 g/100g in Mintel GNPD vs 1.50 g/100g in market snapshot) and the cakes, pastries and buns (0.43 g/100g in Mintel GNPD vs 0.50 g/100g in market snapshot).

4.3 The Irish National Food Ingredient Database

The Irish National Food Ingredient Database (INFID) has been used to determine trends in nutrient content across the priority food categories for food reformulation. Trends in energy (calories), saturated fat (g), sugar (g) and salt (g) per 100 g or 100 ml are shown for the confectionery, snacks and desserts priority food categories. Trends are indicative and should be interpreted cautiously given that INFIDs 4, 5, 6 and 7 were collected as part of surveys of different population subgroups (see Table 1).

The trend towards an increase in the sugar content of non-chocolate confectionery (sugary sweets) between 2011 and 2019 reversed, showing a decline in 2021. There was a noticeable increase in the salt content of savoury snacks and biscuits and crackers between 2011 and 2019 which could be due to the different populations included in these surveys, however this levelled out in 2021. This is outlined in Figure 4.



Note: Food categories represented with an unbroken line are prioritised for reformulation of the target nutrient, while food categories represented with a broken line are not prioritised for reformulation of the target nutrient.

Figure 4 Energy (calories) and target nutrient content trend graph per 100 g of confectionery, snacks and dessert priority food categories between 2011 and 2021, based on INFID 4–7

Matched pair analysis using the INFID datasets provides an in-depth examination of the nutrient content of the same food product within a priority food category, over time. A detailed examination of the INFID 5 and 6 databases was carried out to identify matched pairs (matched pairs are the exact same products on the market in both years, the matching was completed using product name,

manufacturer name and net weight) within the confectionery, snacks and desserts priority food categories.

The nutrient content and percentage differences in the median energy (calories) and nutrient content of the confectionery, snacks and desserts priority food categories, between 2017 and 2019, are presented in Table 20. As the number of matched pairs identified in some of the priority food categories was small, differences in the median energy (calories), saturated fat (g), sugar (g) and salt (g) content per 100 g between the matched pairs were analysed.

Table 20 Nutrient content and percentage change in the median energy (calories) and target nutrient content (per 100 g) of confectionery, snacks and desserts matched product pairs between 2017 and 2019

Priority food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Biscuits including crackers (n=69)	**2017**				
	mean (SD)	**464.67 (43.81)**	**8.93 (4.70)**	**24.37 (14.11)**	**0.77 (0.69)**
	median (IQR)	**483 (58)**	**9.40 (7.70)**	**27.60 (17.60)**	**0.63 (0.65)**
	min-max	**374–525**	**0.30–17**	**0.70–52.60**	**0–3.03**
	2019				
	mean (SD)	**462.28 (44.52)**	**8.43 (4.91)**	**24.16 (14.42)**	**0.74 (0.65)**
	median (IQR)	**477 (59)**	**8.20 (8.80)**	**28 (18.40)**	**0.60 (0.63)**
	min-max	**374–525**	**0.20–17**	**0.50–52.60**	**0–2.96**
	% change (kcal or g)	**-1.24 (-6)**	**-12.77 (-1.20)**	**+1.45 (+0.40)**	**-4.76 (-0.03)**
Cakes pastries and buns (n=12)	**2017**				
	mean (SD)	**405.08 (46.07)**	**6.77 (3.58)**	**30.90 (13.75)**	**0.82 (0.31)**
	median (IQR)	**409 (42.25)**	**5.9 (5.38)**	**30.10 (16.45)**	**0.67 (0.31)**
	min-max	**305–471**	**2.20–13**	**12–61.20**	**0.56–1.60**
	2019				
	mean (SD)	**402.58 (47.80)**	**7.01 (3.94)**	**30.60 (13.84)**	**0.80 (0.22)**
	median (IQR)	**408.50 (38.25)**	**5.70 (7.60)**	**29.45 (16.45)**	**0.74 (0.23)**
	min-max	**305–474**	**2.70–13**	**12–61.20**	**0.58–1.27**
	% change (kcal or g)	**-0.12 (-0.50)**	**-3.39 (-0.20)**	**-2.16 (-0.65)**	**+10.45 (+0.07)**
Chocolate confectionery (n=56)	**2017**				
	mean (SD)	**508.20 (58.99)**	**14.53 (5.81)**	**50.62 (9.88)**	0.32 (0.14)
	median (IQR)	**518 (66.50)**	**15 (7.75)**	**52.05 (12.08)**	0.30 (0.14)
	min-max	**258–606**	**0.60–33**	**26–67.70**	0.09–0.72
	2019				
	mean (SD)	**508.48 (59.42)**	**14.53 (5.92)**	**50.59 (10)**	0.31 (0.15)

	median (IQR)	**521 (61.50)**	**15.25 (7.25)**	**52.05 (11.82)**	0.30 (0.13)
	min-max	**258–623**	**0.60–35**	**26–68**	0.03–0.72
	% change (kcal or g)	**+0.58 (+3)**	**+1.67 (+0.25)**	**0 (0)**	0 (0)
Desserts (n=8)	**2017**				
	mean (SD)	218.50 (86.94)	2.39 (1.99)	**13.90 (5.34)**	0.42 (0.29)
	median (IQR)	219 (92.75)	1.95 (2.67)	**13.80 (8.02)**	0.39 (0.36)
	min-max	70–361	0.30–5.40	**6.30–21.60**	0.10–0.95
	2019				
	mean (SD)	217.38 (86.79)	2.46 (1.92)	**14.45 (5.42)**	0.5 (0.29)
	median (IQR)	214.50 (92.75)	1.95 (2.52)	**16 (8.02)**	0.49 (0.42)
	min-max	70–361	0.30–5.40	**6.30–21.60**	0.10–0.95
	% change (kcal or g)	-2.05 (-4.50)	0 (0)	**+15.94 (+2.20)**	+25.64 (+0.10)
Ice creams (n=11)	**2017**				
	mean (SD)	234.55 (73.67)	**9.20 (4.33)**	**22.45 (5.63)**	0.17 (0.13)
	median (IQR)	270 (83.50)	**9 (5.40)**	**23 (3.55)**	0.14 (0.07)
	min-max	74–303	**1.80–17**	**9–30**	0.04–0.44
	2019				
	mean (SD)	236.73 (74.54)	**9.18 (4.45)**	**21.90 (5.37)**	0.18 (0.14)
	median (IQR)	270 (85)	**9.60 (6.55)**	**23 (4.05)**	0.14 (0.07)
	min-max	74–303	**1.80–17**	**9–30**	0.04–0.47
	% change (kcal or g)	0 (0)	**+6.67 (+0.60)**	**0 (0)**	0 (0)
Non-chocolate confectionery (n=21)	**2017**				
	mean (SD)	370.71 (85.82)	3.41 (3.45)	**42.56 (25.94)**	0.37 (0.39)
	median (IQR)	397 (70)	2.50 (5.60)	**34.10 (27.90)**	0.30 (0.71)
	min-max	74–478	0–9.80	**0.50–94.50**	0–1.20
	2019				
	mean (SD)	376.24 (83.95)	3.35 (3.39)	**45.39 (23.64)**	0.38 (0.36)
	median (IQR)	397 (74)	2.50 (5.60)	**42 (36.70)**	0.37 (0.71)
	min-max	74–478	0–9.50	**6.80–94.50**	0–1.03
	% change (kcal or g)	0 (0)	0 (0)	**+23.17 (+7.90)**	+23.33 (+0.07)
Rice puddings and custard (n=4)	**2017**				
	mean (SD)	98 (7.16)	1.32 (0.22)	**10.55 (1.18)**	0.12 (0.01)
	median (IQR)	98.50 (10.50)	1.30 (0.27)	**10.40 (1.55)**	0.13 (0.01)
	min-max	90–105	1.10–1.60	**9.40–12**	0.11–0.13
	2019				
	mean (SD)	98 (6.48)	1.22 (0.24)	**10.68 (1.08)**	0.12 (0.01)
	median (IQR)	98.50 (10)	1.30 (0.27)	**10.45 (1.52)**	0.12 (0.02)
	min-max	91–104	0.90–1.40	**9.80–12**	0.11–0.13
	% change (kcal or g)	0 (0)	0 (0)	**+0.48 (+0.05)**	-7.69 (-0.01)
	2017				

Savory snacks (n=44)	mean (SD)	**464.59 (96.54)**	4.11 (4.36)	2.33 (2.02)	**1.74 (0.67)**
	median (IQR)	**503 (68.75)**	2.80 (1.25)	1.65 (2.67)	**1.70 (1)**
	min-max	**130–538**	0.60-23.10	0.20–9.30	**0.32–3**
	2019				
	mean (SD)	**476.05 (80.85)**	4.04 (3.95)	2.37 (1.90)	**1.71 (0.60)**
	median (IQR)	**502 (55.25)**	2.95 (1.23)	1.75 (2.95)	**1.69 (0.71)**
	min-max	**130–579**	0.60–23.10	0.20–7.60	**0.32–3**
	% change (kcal or g)	**-0.20 (-1)**	+5.36 (+0.15)	+6.06 (+0.10)	**-0.59 (-0.01)**
Sugars, syrups, preserves and sweeteners (n=20)	**2017**				
	mean (SD)	320.30 (97.05)	0.96 (2.66)	**66.90 (18.67)**	0.08 (0.18)
	median (IQR)	308.50 (100.50)	0.10 (0.22)	**58.50 (25.15)**	0.03 (0.05)
	min-max	194–550	0–10.60	**35–100**	0–0.83
	2019				
	mean (SD)	315.70 (102.31)	0.96 (2.66)	**66.50 (18.81)**	0.08 (0.18)
	median (IQR)	308.50 (107.75)	0.10 (0.23)	**58.50 (25.27)**	0.03 (0.05)
	min-max	169–550	0–10.6	**41–100**	0–0.83
	% change (kcal or g)	0 (0)	0 (0)	**0 (0)**	0 (0)

The nutrients targeted for reformulation in each food category are in bold text.
SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum.

Between 2017 and 2019, changes in the energy (calories) and target nutrient content per 100 g were observed across different confectionery, snacks and desserts priority food categories as follows:

- For the sweet biscuit matched pairs there was a 1.24% (6 kcal) reduction in energy content, a 12.77% (1.20 g) reduction in saturated fat content, a 4.76% (0.03 g) reduction in salt content and a 1.45% (0.40 g) increase in sugar content per 100 g
- For the cakes, pastries and buns matched pairs there was a 0.12% (0.50 kcal) reduction in energy content, a 3.39% (0.20 g) reduction in saturated fat content, a 2.16% (0.65 g) reduction in sugar content and a 10.45% (0.07 g) increase in salt content per 100 g
- For the chocolate confectionery matched pairs there was a 0.58% (3 kcal) increase in energy content, a 1.67% (0.25 g) increase in saturated fat content and no change in the sugar content per 100 g
- For the desserts matched pairs there was a 15.94% (2.20 g) increase in the sugar content per 100 g

- For the ice creams matched pairs there was a 6.67% (0.60 g) increase in saturated fat content and no change in the sugar content per 100 g
- For the non-chocolate confectionery matched pairs there was a 23.17% (7.90 g) increase in the sugar content per 100 g
- For the rice puddings and custard matched pairs there was a 0.48% (0.05 g) increase in the sugar content per 100 g
- For the savoury snacks matched pairs there was a 0.20% (1 g) reduction in the energy and a 0.59% (0.01 g) reduction in the salt content per 100 g
- For the syrups and preserves matched pairs there was no change in the sugar content per 100 g.

Overall, some progress was made in products that remained on the market in 2017 and 2019 in reducing the median energy (sweet biscuits, cakes, pastries and buns, and savoury snacks), saturated fat (sweet biscuits and cakes, pastries and buns), sugar (cakes, pastries and buns) and salt (sweet biscuits and savoury snacks) content per 100 g. However, for almost all categories, increases in one or more of the target nutrients were observed, highlighting the need for focused reformulation efforts by the food industry on these categories.

A visual summary of percentage changes in median nutrient content of the matched pairs in all the priority food categories in 2017 and 2019 is provided in Appendix 3.

5. Cheese and yoghurt priority food categories

The priority food categories in this group are:

1. Cheese
2. Yoghurts.

In 2016 and 2021, market snapshots were carried out for the yoghurts priority food category within this group. Changes in nutrient content of these products were reported in *The Food Reformulation Task Force Progress Report 2023* (Food Safety Authority of Ireland, 2024b).

No foodservice/OOH sector analysis has been undertaken in the cheese and yoghurt priority food categories.

5.1 Market snapshots

In 2023, cheese was included in a market snapshot and these results are outlined in this section. Nutrition declaration and food label information were collected for 622 cheese products. Cheese is

prioritised for the reduction of energy (calories) (20%), saturated fat (10%) and salt (10%). The energy (calories), saturated fat and salt content per 100 g is shown in Table 21. Subcategorisation of the cheese category will be addressed in future work of the task force.

Table 21 Energy (calories), saturated fat and salt content (per 100 g) of the cheese food category in 2023

Food category	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Cheese (n=622)	mean (SD)	331.97 (80.85)	16.91 (5.48)	1.61 (0.59)
	median (IQR)	347.50 (115.50)	18.10 (7)	1.70 (0.51)
	min-max	56–507	0.10–31	0.08–5

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the cheese category, 72.3% provided a suggested serving size, ranging from 10 g to 150 g. The energy (calories), saturated fat and salt content per suggested serving size is shown in Table 22.

Table 22 Energy (calories), saturated fat and salt content (per suggested serving size) of the cheese food category in 2023

Food category	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Cheese (n=450)	mean (SD)	91.84 (43.13)	4.47 (1.91)	0.44 (0.23)
	median (IQR)	83.20 (48.45)	4.34 (2.74)	0.39 (0.20)
	min-max	19.72–448.50	0.07–19.20	0.02–1.90

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

5.2 Mintel Global New Products Database

The Mintel Global New Products Database (GNPD) (Mintel Group Ltd, 2024) was used to assess the nutrient content of new products placed on the Irish market within priority food categories collected in market snapshots.

As cheese products were collected in the 2023 market snapshot, the median nutrient content of the cheese products collected were compared to the median nutrient content of the new cheese products placed on the Irish market in 2023.

There were 622 cheese products collected in the 2023 market snapshot and just 10 new cheese products placed on the Irish market in 2023 according to the Mintel GNPD.

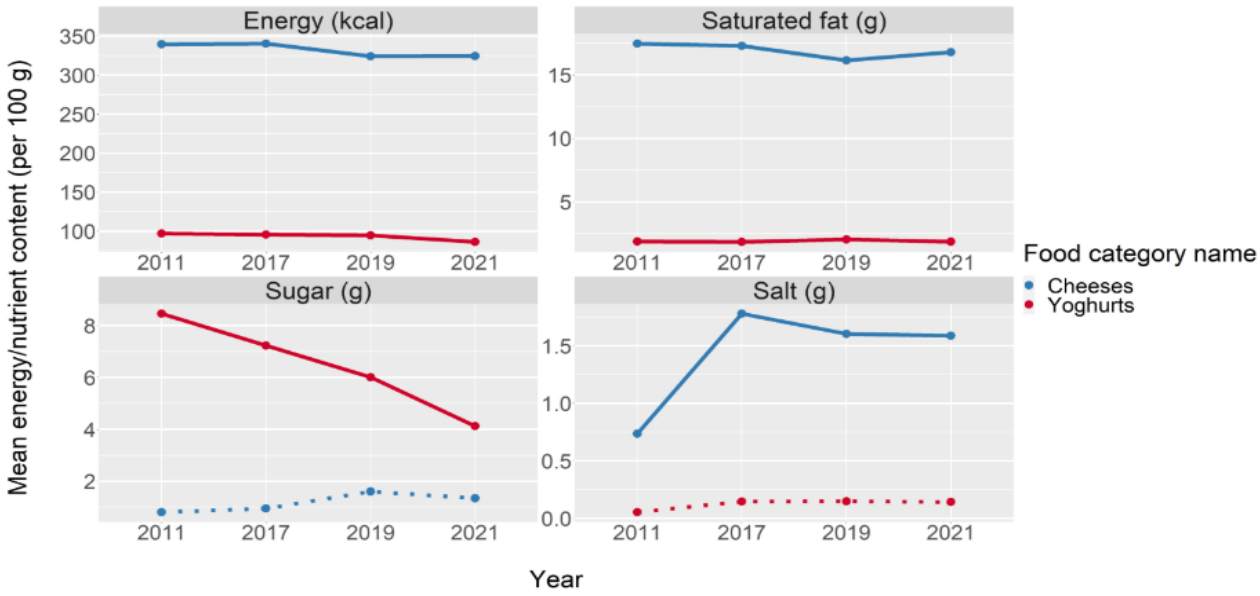
In comparison to the products captured in the market snapshot, the products identified by Mintel GNPD showed:

- A trend towards higher energy (calories) content (368.49 g/100g in Mintel GNPD vs 347.50 g/100g in market snapshot) and higher saturated fat content (19.24 g/100g in Mintel GNPD vs 18.10 g/100g in market snapshot) of the cheese category
- A trend towards lower salt content (1.65 g/100g in Mintel GNPD vs 1.70 g/100g in market snapshot) of the cheese category.

5.3 The Irish National Food Ingredient Database

The Irish National Food Ingredient Database (INFID) datasets have been used to determine trends in nutrient content across the priority food categories for food reformulation. Trends in energy (calories), saturated fat (g), sugar (g) and salt (g) per 100 g, are shown for the cheese and yoghurt priority food categories. Trends are indicative and should be interpreted cautiously given that INFIDs 4, 5, 6 and 7 were collected as part of surveys of different population subgroups (see Table 1).

There was a trend towards decreasing amounts of energy and sugar in yoghurts between 2017 and 2021. A trend towards an increase in saturated fat in cheese between 2019 and 2021 is apparent, while energy and salt content has levelled off. This is shown in Figure 5.



Note: Food categories represented with an unbroken line are prioritised for reformulation of the target nutrient, while food categories represented with a broken line are not prioritised for reformulation of the target nutrient.

Figure 5 Energy (calories) and target nutrient content trend graph per 100 g of cheese and yoghurt priority food categories between 2011 and 2021, based on INFID 4–7

Matched pair analysis using the INFID datasets provides an in-depth examination of the nutrient content of the same food product within a priority food category, over time. A detailed examination of the INFID 5 and 6 databases was carried out to identify matched pairs (matched pairs are the

exact same products on the market in both years, the matching was completed using product name, manufacturer name and net weight) within the cheese and yoghurt priority food categories.

The nutrient content and percentage differences in the median energy (calories) and nutrient content of the cheese and yoghurt priority food categories, between 2017 and 2019, are presented in Table 23. As the number of matched pairs identified in some of the priority food categories was small, differences in the median energy (calories), saturated fat (g), sugar (g) and salt (g) content per 100 g between the matched pairs were analysed.

Table 23 Nutrient content and percentage change in the median energy (calories) and target nutrient content (per 100 g) of cheese and yoghurt matched product pairs between 2017 and 2019

Priority food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Cheeses (n=27)	**2017**				
	mean (SD)	**330.41 (88.65)**	**17.04 (5.37)**	1.08 (1.65)	**1.88 (1.19)**
	median (IQR)	**382 (136)**	**20 (7.35)**	0.50 (0.60)	**1.80 (0.40)**
	min-max	**152–416**	**5.50–22**	0–6.20	**0.70–7.40**
	2019				
	mean (SD)	**324.44 (84.58)**	**17.03 (5.39)**	1.16 (1.73)	**1.59 (0.49)**
	median (IQR)	**372 (127)**	**20 (7.35)**	0.50 (0.06)	**1.75 (0.20)**
	min-max	**150–416**	**5.5–22**	0–6.2	**0.58–2.53**
	% change (kcal or g)	**-2.62 (-10)**	**0 (0)**	0 (0)	**-2.78 (-0.05)**
Yoghurts (n=22)	**2017**				
	mean (SD)	**107 (60.74)**	**2.20 (1.95)**	**6.94 (4.42)**	0.13 (0.04)
	median (IQR)	**87.50 (55)**	**1.85 (1.93)**	**7.15 (5.60)**	0.12 (0.06)
	min-max	**34–335**	**0.10–7.60**	**0–15.20**	0.08–0.21
	2019				
	mean (SD)	**93.41 (33.73)**	**2.14 (1.85)**	**6.56 (4.40)**	0.13 (0.04)
	median (IQR)	**83.50 (36.50)**	**1.85 (1.88)**	**7.05 (5.57)**	0.12 (0.05)
	min-max	**28–153**	**0.10–7.60**	**0–15.20**	0.07–0.23
	% change (kcal or g)	**-4.57 (-4)**	**0 (0)**	**-1.40 (-0.10)**	0 (0)

The nutrients targeted for reformulation in each food category are in bold text.
SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum.

Between 2017 and 2019, changes in the energy (calories) and target nutrient content per 100 g were observed across different cheese and yoghurts priority food categories as follows:

- For the cheeses matched pairs there was a 2.62% (10 kcal) reduction in energy, no change in saturated fat and a 2.78% (0.05 g) reduction in salt content per 100 g;

- For the yoghurts matched pairs there was a 4.57% (4 kcal) reduction in energy, no change in saturated fat and a 1.40% (0.10 g) reduction in the sugar content per 100 g.

Overall, the nutrient content of the cheese and yoghurt priority food categories improved in products that remained on the market between 2017 and 2019.

A visual summary of percentage changes in median nutrient content of the matched pairs in all the priority food categories in 2017 and 2019 is provided in Appendix 3.

5.4 Laboratory analysis and nutrition declaration verification

Since 2003, the FSAI has been monitoring the sodium[1] content of 11 food categories via a voluntary Salt Reduction Programme. These 11 categories were identified as priority for reformulation due to their contribution to salt in the diets of people living in Ireland. The background and methodology used in the Salt Reduction Programme is described in the *Monitoring Sodium and Potassium in Processed Foods (September 2003 to December 2023)* report (Food Safety Authority of Ireland, 2024f). Since 2022, the task force has continued the Salt Reduction Programme approach to monitoring the sodium and potassium content of foods.

In 2023, a convenience sample of 106 processed cheeses[2] were collected from the Irish market and sampled for sodium and potassium content. The subcategories of processed cheeses sampled were: blocks, strips and slices; reduced-fat blocks, strips and slices; spreads; reduced-fat spread; snack packs; and a new subcategory plant-based cheese alternative, which was created to reflect market trends. Samples were collected from a range of supermarkets and convenience stores within the locality of the sampling officers and sent to GPAL for analysis (Irish National Accreditation Board Registration Number: 009T).

In addition, nutrition declaration verification analysis was undertaken in relation to salt. The EC guideline nutrition labelling tolerances for salt are defined as a tolerance of ± 0.375 g if the product contains <1.25 g of salt per 100 g, and a tolerance of ± 20% if the product contains ≥1.25 g of salt per 100 g (European Commission, 2012). This analysis involved using a Nutrition Tolerance Calculator built by the FSAI in Microsoft Excel.

[1] In this section, sodium content is reported in line with the Salt Reduction Programme which has been underway since 2003. Salt is reported throughout the rest of the report, in line with *A Roadmap for Food Product Reformulation in Ireland*.
[2] Processed cheeses is a subcategory of the cheese priority food category.

5.4.1 Laboratory analysis results

Between 2009 and 2023, a significant decrease in the sodium content of the blocks, strips and slices (24%, *p*=0.012) and reduced-fat blocks, strips and slices (37%, *p*=0.014) subcategories were observed. However, in the blocks, strips and slices subcategory in more recent years, between 2019 and 2023, an increase in the sodium content was observed (14%, *p*=0.048). In terms of potassium, between 2009 and 2023 a significant increase in the potassium content of the blocks, strips and slices (233%, p=0.001) subcategory was observed. The results of this sampling are outlined in Table 24 and Table 25.

Additional information on this analysis can be found in *Monitoring Sodium and Potassium in Processed Foods (September 2003 to December 2023)* (Food Safety Authority of Ireland, 2024f).

Table 24 Mean (SD) sodium content of processed cheese (mg/100 g) between 2009 and 2023

Sub-category	Mean (SD) sodium (mg/100 g) content per year of survey				Statistical significance (2009 vs 2023)	% sodium content change (2009 vs 2023)	Statistical significance (2019 vs 2023)	% sodium content change (2019 vs 2023)
	2009	2014[g]	2019	2023				
Blocks, strips and slices[a] [b]	1095 (330)	867 (261)	732 (219)	835 (207)	0.012	-24	0.048	+14
Reduced-fat blocks, strips and slices[a] [b]	1298 (219)	836 (224)	942 (341)	820 (112)	0.014	-37	NS	-13
Spreads[c]	626 (392)	535 (252)	495 (294)	442 (198)	NS	-29	NS	-11
Reduced-fat spreads[d]	612 (310)	376 (238)	396 (223)	395 (216)	NS	-35	NS	No change
Snack packs[e]	NT	NT	591 (205)	517 (57)	N/A	N/A	NS	-12
Plant-based cheese alternatives[f]	NT	NT	NT	641 (204)	N/A	N/A	N/A	N/A
Total samples	36	173	107	106	Overall total=422			

[a] Includes white and red/coloured cheese slices, individually wrapped or not.
[b] Includes white and red/coloured cheese slices which are light, reduced-fat or half-fat, individually wrapped or not.
[c] Includes white and red/coloured cheese spreads (individually portioned or not), cheese spreads with added ingredients such as herbs, vegetables and meats, and spreads used as cooking sauces.
[d] Includes white and red/coloured cheese spreads which are light, reduced-fat or half-fat (individually wrapped or not), reduced-fat cheese spreads with added ingredients such as herbs, vegetables and meats, and spreads used as cooking sauces.
[e] Includes products containing crackers/bread sticks with a portion of cheese included, which are often aimed at children. Only the processed cheese portion of the product was analysed for sodium content.
[f] Includes plant-based alternatives to processed cheese blocks, slices and spreads
[g]Taken between October and December 2014, comprising 82 branded and 91 private label samples.
N/A, results not available; NS, not statistically significant; NT, not tested.

Table 25 Mean (SD) potassium content of processed cheese (mg/100 g) between 2009 and 2023

Sub-category	Mean (SD) potassium (mg/100 g) content per year of survey				Statistical significance (2009 vs 2023)	% potassium content change (2009 vs 2023)	Statistical significance (2019 vs 2023)	% potassium content change (2019 vs 2023)
	2009	2014[g]	2019	2023				
Blocks, strips and slices[a] [b]	88 (34)	162 (187)	232 (255)	293 (288)	0.001	+233	NS	+26
Reduced-fat blocks, strips and slices[a] [b]	150 (70)	255 (221)	148 (78)	208 (79)	NS	+38	NS	+40
Spreads[c]	164 (76)	206 (143)	162 (67)	194 (111)	NS	+18	NS	+20
Reduced-fat spreads[d]	192 (37)	181 (98)	238 (196)	225 (138)	NS	+17	NS	-6
Snack packs[e]	NT	NT	316 (189)	455 (181)	N/A	N/A	NS	+44
Plant-based cheese alternatives[f]	NT	NT	NT	69 (67)	N/A	N/A	N/A	N/A
Total samples	36	173	107	106	Overall total=422			

[a] Includes white and red/coloured cheese slices, individually wrapped or not.
[b] Includes white and red/coloured cheese slices which are light, reduced-fat or half-fat, individually wrapped or not.
[c] Includes white and red/coloured cheese spreads (individually portioned or not), cheese spreads with added ingredients such as herbs, vegetables and meats, and spreads used as cooking sauces.
[d] Includes white and red/coloured cheese spreads which are light, reduced-fat or half-fat (individually wrapped or not), reduced-fat cheese spreads with added ingredients such as herbs, vegetables and meats, and spreads used as cooking sauces.
[e] Includes products containing crackers/bread sticks with a portion of cheese included, which are often aimed at children. Only the processed cheese portion of the product was analysed for potassium content.
[f] Includes plant-based alternatives to processed cheese blocks, slices and spreads.
[g] Taken between October and December 2014, comprising 82 branded and 91 private label samples.
N/A, results not available; NS, not statistically significant; NT, not tested.

5.4.2 Nutrition declaration verification

Of the 106 processed cheeses sampled, 95 had salt declared on the product label[3], which included blocks, strips, slices, spreads and reduced-fat alternatives in addition to plant-based cheese alternatives. None of the processed cheese sampled made a nutrition or health claim related to salt.

For this analysis, the sodium content (mg per 100 g) reported in the *Monitoring Sodium and Potassium in Processed Foods* report was converted into a salt equivalent (g per 100 g) by multiplying the sodium value by 2.54 and dividing by 1000, referred to as salt content (g per 100 g).

The conformance of the nutrition declarations with the EC guideline nutrition labelling tolerances was also assessed. Of the processed cheeses (n=95) analysed, 90.5% (n=86) were within the EC guideline nutrition labelling tolerances for salt. A small proportion (9.5%, n=9) of processed cheeses were non-conformant with the EC guideline nutrition labelling tolerances for salt with 66.7% (n=6) of non-conformant products having a salt content below the lower tolerance range. This was raised at the processed cheese category meeting in 2024. It is worth noting that 55.6% (n=5) of non-conformant processed cheeses had minor deviations ranging from -0.0078 to -0.0378 g/100 g below the lower tolerances for salt, and between 0.0082 to 0.0288 g/100 g above the upper tolerances for salt. The trend in nutrition labelling tolerances for salt is outlined in Figure 6.

[3] The remaining 11 products were snack packs that had a nutrition declaration for the entire product i.e. cheese and crackers or cheese with Oreos and ham. Therefore, the salt value for the cheese alone could not be determined.

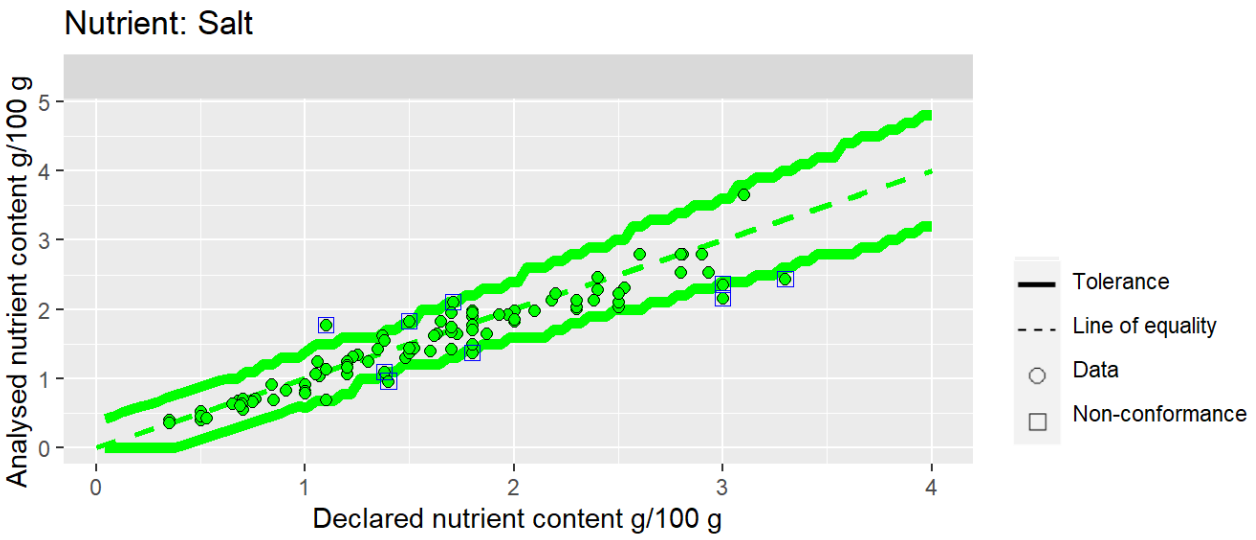


Figure 6 Trend in salt nutrition labelling tolerances for processed cheeses in 2023

The findings indicate that the declared salt content in processed cheeses (n=95) may accurately reflect changes in the nutrient content of food products over time and reflect the true food reformulation efforts.

Additional details on this analysis can be found in *The Accuracy of Nutrition Declarations on the Labels of Sugar-Sweetened Carbonated Beverages and Processed Cheeses Sampled in 2023* (Food Safety Authority of Ireland, 2024a).

6. Fats and spreads priority food categories

The priority food categories grouped into fats and spreads are as follows:

1. Butter (over 80% fat)
2. Other fat spreads (40–80% fat).

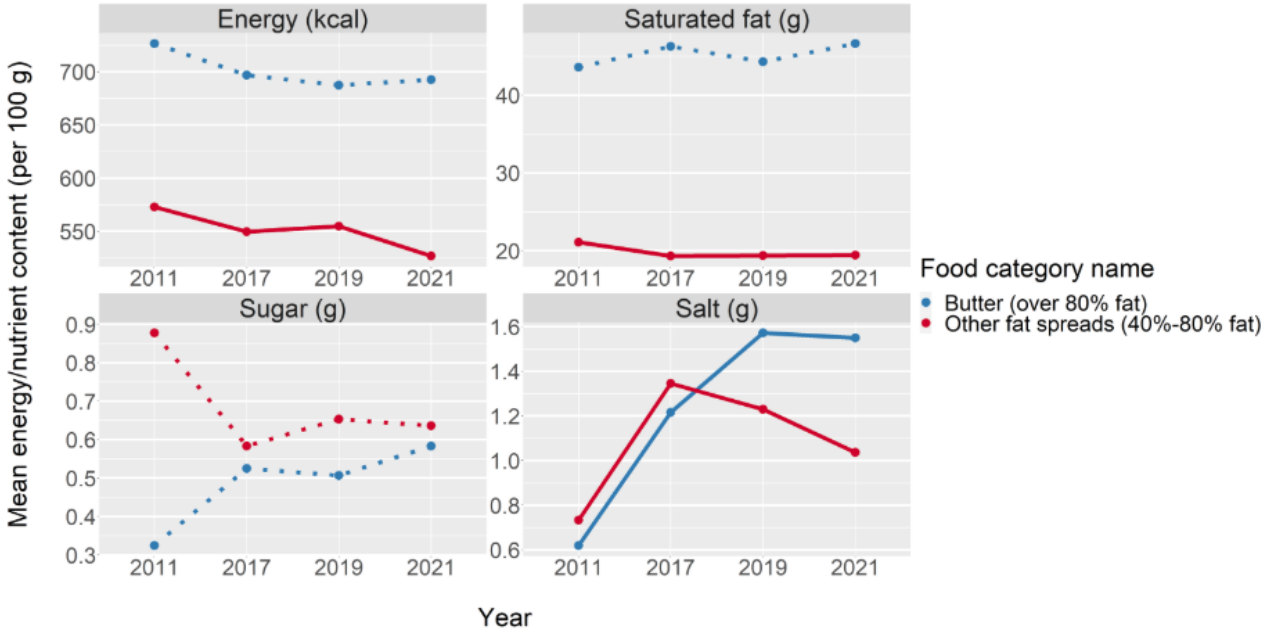
No market snapshots, Mintel GNPD, nutrition declaration verification analysis, foodservice/OOH sector analysis or research have been undertaken in the fats and spreads priority food categories. This will be addressed in future work of the task force.

These priority food categories have been included in sodium and potassium sampling which has been ongoing in the FSAI since 2003 and the results can be found in *Monitoring Sodium and Potassium in Processed Foods* (Food Safety Authority of Ireland, 2023c).

6.1 The Irish National Food Ingredient Database

The Irish National Food Ingredient Database (INFID) datasets have been used to determine trends in nutrient content across the priority food categories for food reformulation. Trends in energy (calories), saturated fat (g), sugar (g) and salt (g) per 100 g are shown for the fats and spreads[4] priority food categories. Trends are indicative and should be interpreted cautiously given that the INFID data are for different population groups.

There was a trend towards an increase in the salt content of butter which appears to have levelled off in 2021, while the salt content of other fat spreads reduced between 2017 and 2021. This is shown in Figure 7.



Note: Food categories represented with an unbroken line are prioritised for reformulation of the target nutrient, while food categories represented with a broken line are not prioritised for reformulation of the target nutrient.

Figure 7 Energy (calories) and target nutrient content trend graph per 100 g of fats and spreads priority food categories between 2011 and 2021, based on INFID 4–7

Matched pair analysis using the INFID datasets provides an in-depth examination of the nutrient content of the same food product within a priority food category, over time. A detailed examination of the INFID 5 and 6 databases was carried out to identify matched pairs (matched pairs are the

[4] These priority food categories contain naturally occurring sugar due to the presence of lactose in milk.

exact same products on the market in both years, the matching was completed using product name, manufacturer name and net weight) within the fats and spreads priority food categories.

The nutrient content and percentage differences in the median energy (calories) and nutrient content of the fats and spreads priority food categories, between the two years, are presented in Table 26. As the number of matched pairs identified in some of the priority food categories was small, differences in the median energy (calories), saturated fat (g), sugar (g) and salt (g) content per 100 g between the matched pairs were analysed.

Table 26 Nutrient content and percentage change in the median energy (calories) and target nutrient content (per 100 g) of fats and spreads matched product pairs between 2017 and 2019

Priority food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Butter (over 80% fat) (n=7)	**2017**				
	mean (SD)	658 (143.13)	41 (13.81)	0.46 (0.22)	**1.49 (0.26)**
	median (IQR)	739 (115.50)	48.90 (21.90)	0.60 (0.30)	**1.50 (0.39)**
	min-max	384–744	20.90–53	0.10–0.70	**1.10–1.80**
	2019				
	mean (SD)	658 (143.13)	41 (13.81)	0.36 (0.25)	**1.49 (0.26)**
	median (IQR)	739 (115.50)	48.90 (21.90)	0.30 (0.40)	**1.50 (0.39)**
	min-max	384–744	20.90–53	0–0.60	**1.10–1.80**
	% change (kcal or g)	0 (0)	0 (0)	-50 (-0.30)	**0 (0)**
Other fat spreads (40%-80% fat) (n=7)	**2017**				
	mean (SD)	**565.14 (101.24)**	**22.09 (9.76)**	0.64 (0.21)	**1.44 (0.34)**
	median (IQR)	**577 (90)**	**22.80 (9.10)**	0.50 (0.25)	**1.40 (0.25)**
	min-max	**405–724**	**10–40**	0.50–1	**0.75–1.80**
	2019				
	mean (SD)	**593.71 (72.43)**	**22.94 (8.61)**	0.64 (0.21)	**1.43 (0.34)**
	median (IQR)	**587 (55.50)**	**22 (7.90)**	0.50 (0.25)	**1.40 (0.27)**
	min-max	**490–724**	**14.80–40**	0.50–1	**0.75–1.80**
	% change (kcal or g)	**+1.73 (+10)**	**-3.51 (-0.80)**	0 (0)	**0 (0)**

These priority food categories contain naturally occurring sugar due to the presence of lactose in milk. The nutrients targeted for reformulation in each food category are in bold text.
SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum.

Between 2017 and 2019, changes in the energy (calories) and target nutrient content per 100 g were observed across different fats and spreads priority food categories as follows:

- For the butter (over 80% fat) matched pairs there was no change in the salt content per 100 g

- For the other fat spreads (40%–80% fat) matched pairs there was a 1.73% (10 kcal) increase in the energy content, a 3.51% (0.80 g) reduction in the saturated fat content and no change in the salt content per 100 g.

While an improvement in the saturated fat content of the other fat spread (40%–80% fat) category was observed, continued reformulation efforts to meet the targets are needed by the food industry.

A visual summary of percentage changes in median nutrient content of the matched pairs in all the priority food categories in 2017 and 2019 are provided in Appendix 3.

7. Cereals and breads priority food categories

The priority food categories grouped into cereals and breads are as follows:

1. Ready-to-eat breakfast cereals (RTEBC)
2. Other breakfast cereals
3. White sliced bread and rolls
4. Wholemeal and brown bread and rolls
5. Other breads.

No Mintel GNPD or foodservice/OOH sector analysis has been undertaken in the cereals and breads priority food categories.

These priority food categories have been included in sodium and potassium sampling which has been ongoing in the FSAI since 2003 and the results can be found in *Monitoring Sodium and Potassium in Processed Foods* (Food Safety Authority of Ireland, 2023c). In addition, nutrition declaration verification analysis was carried out on the bread categories in 2022 and the results can be found in *The Accuracy of Nutrition Declarations on the Labels of Pre-Packed Soups, Sauces and Breads Sampled in 2022* (Food Safety Authority of Ireland, 2023b).

7.1 Market snapshots

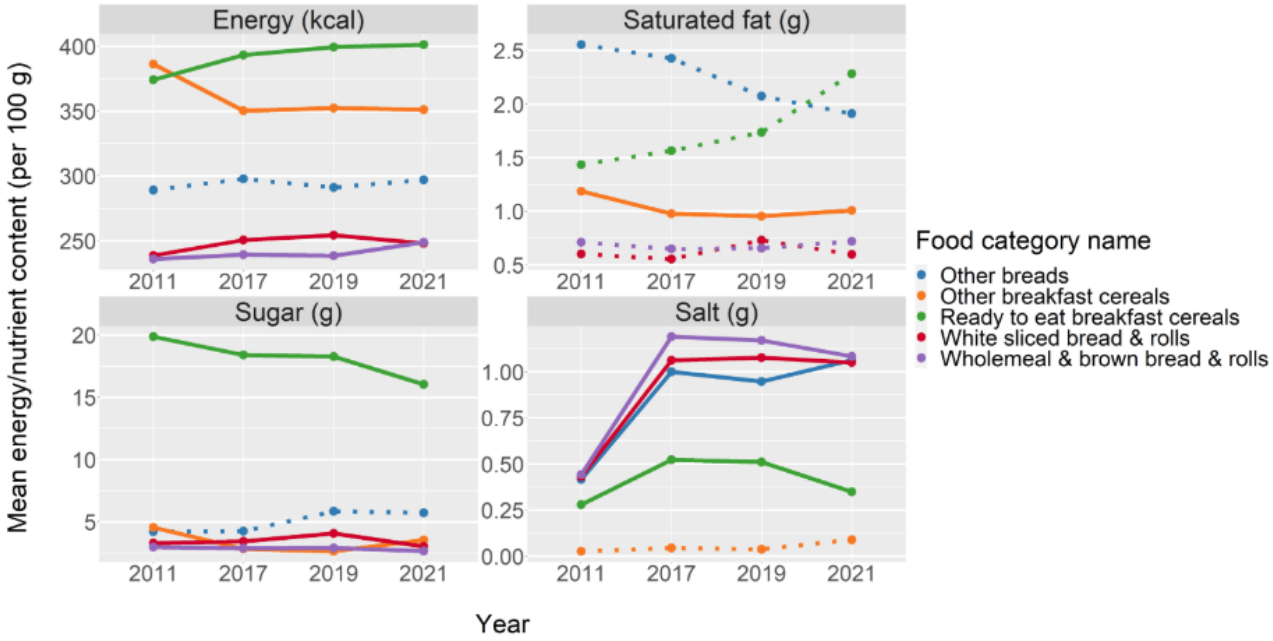
In 2016 and 2021, market snapshots were carried out for breakfast cereals. The changes in nutrient content of these products between 2016 and 2021 were reported in *The Food Reformulation Task Force Progress Report 2023* (Food Safety Authority of Ireland, 2024b). Breads were also included in the 2021 market snapshot and the nutrient content of these products were reported in *The Food Reformulation Task Force Progress Report 2023* (Food Safety Authority of Ireland, 2024b) and are

outlined in Appendix 2. All of these priority food categories were included in a 2024 market snapshot and the changes in breakfast cereals between 2016, 2021 and 2024 and breads between 2021 and 2024 will be reported in the 2025 progress report.

7.2 The Irish National Food Ingredient Database

The Irish National Food Ingredient Database (INFID) datasets have been used to determine trends in nutrient content across the priority food categories for food reformulation. Trends in energy (calories), saturated fat (g), sugar (g) and salt (g) per 100 g, are shown for the cereals and breads priority food categories. Trends are indicative and should be interpreted cautiously given that INFIDs 4, 5, 6 and 7 were collected as part of surveys of different population subgroups (see Table 1).

There was no consistent trend in the energy content of cereals and breads between 2011 and 2021. Other breakfast cereals saw a reduction and levelling of energy, whereas RTEBC saw an increase in energy content. There is a continued trend towards the reduction in sugar content of RTEBC Between 2019 and 2021, the salt content of RTEBC and wholemeal and brown breads and rolls appears to have decreased, while the opposite is seen in the other breads. This is shown in Figure 8. The increase in the salt content observed between 2011 and 2017 could be due to the different products consumed by different population subgroups included in these surveys.



Note: Food categories represented with an unbroken line are prioritised for reformulation of the target nutrient, while food categories represented with a broken line are not prioritised for reformulation of the target nutrient.

Figure 8 Energy (calories) and target nutrient content trend graph per 100 g of cereal and bread priority food categories between 2011 and 2021, based on INFID 4–7

Matched pair analysis using the INFID datasets provides an in-depth examination of the nutrient content of the same food product within a priority food category, over time. A detailed examination of the INFID 5 and 6 databases was carried out to identify matched pairs (matched pairs are the exact same products on the market in both years, the matching was completed using product name, manufacturer name and net weight) within the cereals and breads priority food categories.

The nutrient content and percentage differences in the median energy (calories) and nutrient content of the cereals and breads priority food categories, between 2017 and 2019, are presented in Table 27. As the number of matched pairs identified in some of the priority food categories was small, differences in the median energy (calories), saturated fat (g), sugar (g) and salt (g) content per 100 g between the matched pairs were analysed.

Table 27 Nutrient content and percentage change in the median energy (calories) and target nutrient content (per 100 g) of cereals and breads matched product pairs between 2017 and 2019

Priority food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Ready-to-eat breakfast cereals (n=46)	**2017**				
	mean (SD)	**390.46 (33.19)**	1.29 (1.88)	**18.45 (9.90)**	**0.58 (0.29)**
	median (IQR)	**381 (17.50)**	0.60 (0.95)	**21 (15.50)**	**0.64 (0.35)**
	min-max	**334–501**	0.10–9.80	**0.70–37**	**0.01–1.13**
	2019				
	mean (SD)	**390.61 (33.52)**	1.20 (1.74)	**17.03 (8.95)**	**0.56 (0.29)**
	median (IQR)	**380 (21)**	0.60 (0.98)	**17.50 (12.80)**	**0.57 (0.43)**
	min-max	**334–501**	0.10–9.80	**0.70–37**	**0.02-1.13**
	% change (kcal or g)	**-0.26 (-1)**	0 (0)	**-16.67 (-3.50)**	**-10.94 (-0.07)**
Other breakfast cereals (n=9)	**2017**				
	mean (SD)	**372.11 (1.90)**	**1.08 (0.15)**	**1.07 (0.32)**	0.02 (0.01)
	median (IQR)	**371 (3)**	**1 (0.20)**	**1 (0.10)**	0.02 (0.02)
	min-max	**370–375**	**0.90–1.30**	**0.70–1.60**	0.01–0.03
	2019				
	mean (SD)	**371.67 (1.58)**	**1.03 (0.13)**	**1.16 (0.31)**	0.03 (0.03)
	median (IQR)	**371 (2)**	**1 (0.30)**	**1 (0.60)**	0.02 (0.02)
	min-max	**370–374**	**0.90–1.20**	**0.90–1.60**	0.01–0.10
	% change (kcal or g)	**0 (0)**	**0 (0)**	**0 (0)**	0 (0)
White sliced bread and rolls (n=27)	**2017**				
	mean (SD)	**247.63 (22.86)**	0.55 (0.66)	**3.34 (1.73)**	**1.10 (0.18)**
	median (IQR)	**246 (35)**	0.40 (0.20)	**2.90 (1.40)**	**1.10 (0.10)**
	min-max	**212–299**	0.10–2.90	**0.90–7.70**	**0.80–1.44**
	2019				
	mean (SD)	**247.11 (24.78)**	0.54 (0.49)	**3.43 (1.75)**	**1.10 (0.21)**
	median (IQR)	**245 (31)**	0.40 (0.25)	**3.20 (1.35)**	**1.10 (0.11)**
	min-max	**212–321**	0.10–2.40	**0.90–7.70**	**0.80–1.70**
	% change (kcal or g)	**-0.41 (-1)**	0 (0)	**+10.34 (+0.30)**	**0 (0)**
Wholemeal and brown bread and rolls (n=18)	**2017**				
	mean (SD)	**236.90 (21.78)**	0.53 (0.37)	**2.89 (0.74)**	**1.20 (0.29)**
	median (IQR)	**230.50 (18.25)**	0.45 (0.37)	**3 (0.90)**	**1.06 (0.40)**
	min-max	**207–301**	0–1.40	**1.70–4.50**	**0.95–1.81**
	2019				
	mean (SD)	**235.39 (22.98)**	0.62 (0.53)	**2.84 (0.86)**	**1.19 (0.27)**
	median (IQR)	**230.50 (20)**	0.45 (0.37)	**2.85 (1.17)**	**1.07 (0.28)**
	min-max	**203–301**	0.10–2.30	**1.70–4.50**	**0.95–1.81**

	% change (kcal or g)	**0 (0)**	0 (0)	**-5 (-0.15)**	**+0.94 (+0.01)**
Other breads (n=22)	**2017**				
	mean (SD)	283.59 (26.22)	1.17 (1.18)	5.92 (3.86)	**0.94 (0.19)**
	median (IQR)	273.50 (28.25)	0.55 (1.55)	5.75 (4.33)	**0.90 (0.16)**
	min-max	254–370	0.20–4.40	2–18	**0.53–1.40**
	2019				
	mean (SD)	283.32 (25.33)	1.18 (1.23)	5.55 (3.86)	**0.96 (0.23)**
	median (IQR)	274.50 (25.75)	0.55 (1.40)	4.50 (4.85)	**0.90 (0.15)**
	min-max	254–370	0.20–4.60	1.60–18	**0.49–1.54**
	% change (kcal or g)	+0.37 (+1)	0 (0)	-21.74 (-1.25)	**0 (0)**

The nutrients targeted for reformulation in each food category are in bold text.
SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum.

Between 2017 and 2019, changes in the energy (calories) and target nutrient content per 100 g were observed across different cereal and breads priority food categories as follows:

- For the RTEBC matched pairs there was a 0.26% (1 kcal) reduction in the energy, a 16.67% (3.50 g) reduction in the sugar and a 10.94% (0.07 g) reduction in the salt content per 100 g
- For the other breakfast cereals matched pairs there was no change in the energy, saturated fat or sugar content per 100 g
- For the white sliced bread and rolls matched pairs there was a 0.41% (1 kcal) reduction in the energy, a 10.34% (0.30 g) increase in the sugar and no change in the salt content per 100 g
- For the wholemeal and brown bread and rolls matched pairs there was no change in the energy, a 5% (0.15 g) reduction in the sugar and a 0.94% (0.01 g) increase in the salt content per 100 g
- For the other breads matched pairs there was no change in the salt content per 100 g.

While some progress has been made in reducing the median energy (RTEBC and white sliced bread & rolls), sugar (RTEBC, wholemeal & brown bread and rolls and other breads) and salt (RTEBC) in products that remained on the market in 2017 and 2019, continued reformulation efforts are needed by the food industry.

A visual summary of percentage changes in median nutrient content of the matched pairs in all the priority food categories in 2017 and 2019 are provided in Appendix 3.

8. Vegetable, potato and savoury products priority food categories

The priority food categories grouped into vegetable, potato and savoury products are as follows:

1. Chipped fried and roasted potatoes
2. Peas, beans and lentils
3. Processed potato products
4. Savouries
5. Vegetable and pulse dishes.

No market snapshot, Mintel GNPD, laboratory analysis and nutrition declaration verification analysis, foodservice/OOH sector analysis or research has been undertaken for the chipped fried and roasted potatoes, peas, beans and lentils, processed potato products and vegetable and pulse dishes priority food categories. This will be addressed in the future work of the task force.

8.1 Market snapshots

In 2023, savouries were included in a market snapshot and these results are outlined in this section.

8.1.1 Savouries

In 2023, nutrition declaration and food label information were collected for 568 savouries. Savouries are prioritised for the reduction of energy (calories) (20%), saturated fat (10%), and salt (10%). The energy (calories), saturated fat and salt content per 100 g is shown in Table 28.

Table 28 Energy (calories), saturated fat and salt content (per 100 g) of the savouries category in 2023

Food category	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Savouries (n=568)	mean (SD)	193.98 (79.21)	2.63 (2.53)	0.80 (0.38)
	median (IQR)	206.50 (118.25)	2.15 (3.42)	0.75 (0.50)
	min-max	19–496	0–13.30	0–3.45

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the savouries category, 78.5% provided a suggested serving size, ranging from 15 g to 485 g. The energy (calories), saturated fat and salt content per suggested serving size is shown in Table 29.

Table 29 Energy (calories), saturated fat and salt content (per suggested serving size) of the savouries category in 2023

Food category	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Savouries (n=446)	mean (SD)	317.80 (164.91)	4.21 (4.10)	1.41 (0.91)
	median (IQR)	291.48 (205.07)	3.10 (6.53)	1.26 (1.18)
	min-max	32.7–966	0–22.68	0–4.96

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

For the purposes of this report in order to further analyse this priority food category, the savouries category has been subcategorised into the following: pizza[5]; savoury pasta-based products[6]; savoury rice-based products[7]; savoury noodle-based products[8]; savoury couscous-based products[9]; and other savouries[10].

8.1.2 Pizza

In 2023, nutrition declaration and food label information were collected for 203 pizzas. Pizza, which is a subcategory of the savouries category, is prioritised for the reduction of energy (calories) (20%), saturated fat (10%) and salt (10%). The energy (calories), saturated fat and salt content per 100 g is shown in Table 30.

Table 30 Energy (calories), saturated fat and salt content (per 100 g) of the pizza subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Pizza (n=203)	mean (SD)	246.72 (29.24)	3.75 (1.78)	1.01 (0.25)
	median (IQR)	246 (35)	3.70 (1.90)	0.98 (0.34)
	min-max	174–400	0–13	0.27–2.10

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the pizza subcategory, 68.0% provided a suggested serving size, ranging from 32 g to 420 g. The energy (calories), saturated fat and salt content per suggested serving size is shown in Table 31.

[5] This included refrigerated and frozen pizzas.
[6] This included tinned pasta (stuffed, spaghetti hoops/shapes in tomato sauce), pasta dishes dried in pouches (i.e., macaroni and cheese) and stuffed pasta.
[7] This included pouches, tubs, and packs of flavoured rice.
[8] This included noodle packs with sauces, noodle tubs with sauces.
[9] This included flavoured couscous.
[10] This included products such as quiche, vol-au-vent, stuffing, breadcrumbs and dumplings.

Table 31 Energy (calories), saturated fat and salt content (per suggested serving size) of the pizza subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Pizza (n=138)	mean (SD)	456.47 (184.27)	7.17 (4.08)	1.94 (0.94)
	median (IQR)	434.60 (222.05)	6.70 (4.73)	1.79 (0.95)
	min-max	91.26–966	0.04–22.68	0.28–4.96

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

8.1.3 Savoury pasta-based products

In 2023, nutrition declaration and food label information were collected for 110 savoury pasta-based products. Savoury pasta-based products, which is a subcategory of the savouries category, is prioritised for the reduction of energy (calories) (20%), saturated fat (10%) and salt (10%). The energy (calories), saturated fat and salt content per 100 g is shown in Table 32.

Table 32 Energy (calories), saturated fat and salt content (per 100 g) of the savoury pasta-based products subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Savoury pasta-based products (n=110)	mean (SD)	150.65 (69.98)	1.30 (1.19)	0.66 (0.39)
	median (IQR)	148 (106.50)	1.05 (1.80)	0.58 (0.39)
	min-max	40–298	0–5.20	0.23–3.45

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the savoury pasta-based products subcategory, 90.9% provided a suggested serving size, ranging from 125 g to 440 g. The energy (calories), saturated fat and salt content per suggested serving size is shown in Table 33.

Table 33 Energy (calories), saturated fat and salt content (per suggested serving size) of the savoury pasta-based products subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Savoury pasta-based products (n=100)	mean (SD)	260.25 (94.61)	2.17 (1.75)	1.14 (0.54)
	median (IQR)	267.31 (106.89)	2 (2.79)	1.02 (0.58)
	min-max	68.50–474.32	0–7.92	0.41–4.31

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

8.1.4 Savoury rice-based products

In 2023, nutrition declaration and food label information were collected for 76 savoury rice-based products. Savoury rice-based products, which is a subcategory of the savouries category, is prioritised for the reduction of energy (calories) (20%), saturated fat (10%) and salt (10%). The energy (calories), saturated fat and salt content per 100 g is shown in Table 34.

Table 34 Energy (calories), saturated fat and salt content (per 100 g) of the savoury rice-based products subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Savoury rice-based products (n=76)	mean (SD)	150.28 (50.41)	0.46 (0.52)	0.55 (0.46)
	median (IQR)	150 (26.25)	0.30 (0.23)	0.44 (0.15)
	min-max	19–359	0.10–3.60	0.02–2.61

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the savoury rice-based products subcategory, 92.1% provided a suggested serving size, ranging from 89 g to 470 g. The energy (calories), saturated fat and salt content per suggested serving size is shown in Table 35.

Table 35 Energy (calories), saturated fat and salt content (per suggested serving size) of the savoury rice-based products subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Savoury rice-based products (n=70)	mean (SD)	205.13 (45.16)	0.64 (0.69)	0.76 (0.63)
	median (IQR)	192.50 (26.25)	0.47 (0.35)	0.55 (0.21)
	min-max	138.75–354.20	0.12–4.50	0.03–3.76

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

8.1.5 Savoury noodle-based products

In 2023, nutrition declaration and food label information were collected for 103 savoury noodle-based products. Savoury noodle-based products, which is a subcategory of the savouries category, is prioritised for the reduction of energy (calories) (20%), saturated fat (10%) and salt (10%). The energy (calories), saturated fat and salt content per 100 g is shown in Table 36.

Table 36 Energy (calories), saturated fat and salt content (per 100 g) of the savoury noodle-based products subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Savoury noodle-based products (n=103)	mean (SD)	134.84 (90.30)	2.02 (2.03)	0.71 (0.36)
	median (IQR)	102 (56.50)	1.60 (2.40)	0.61 (0.38)
	min-max	38–496	0.05–10.30	0–1.90

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the savoury noodle-based products subcategory, 82.5% provided a suggested serving size, ranging from 85 g to 485 g. The energy (calories), saturated fat and salt content per suggested serving size is shown in Table 37.

Table 37 Energy (calories), saturated fat and salt content (per suggested serving size) of savoury noodle-based products subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Savoury noodle-based products (n=85)	mean (SD)	334.72 (105.20)	4.98 (3.72)	1.90 (0.81)
	median (IQR)	312 (152.88)	5.85 (7.38)	1.77 (0.97)
	min-max	85.50–550.55	0.17–11.46	0–3.51

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

8.1.6 Savoury couscous-based products

In 2023, nutrition declaration and food label information were collected for 11 savoury couscous-based products. Savoury couscous-based products, which is a subcategory of the savouries category, is prioritised for the reduction of energy (calories) (20%), saturated fat (10%) and salt (10%). The energy (calories), saturated fat and salt content per 100 g is shown in Table 38.

Table 38 Energy (calories), saturated fat and salt content (per 100 g) of the savoury couscous-based products subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Savoury couscous-based products (n=11)	mean (SD)	158.18 (63.74)	0.38 (0.21)	0.58 (0.32)
	median (IQR)	139 (8)	0.40 (0.35)	0.48 (0.15)
	min-max	134–350	0.10–0.70	0.38–1.50

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the savoury couscous-based products subcategory, 90.9% provided a suggested serving size, ranging from 130 g to 140 g. The energy (calories), saturated fat and salt content per suggested serving size is shown in Table 39.

Table 39 Energy (calories), saturated fat and salt content (per suggested serving size) of the savoury couscous-based products subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Savoury couscous-based products (n=10)	mean (SD)	187.11 (11.51)	0.51 (0.31)	0.66 (0.12)
	median (IQR)	186.97 (20.26)	0.54 (0.50)	0.65 (0.18)
	min-max	174.20–203	0.13–0.98	0.52–0.88

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

8.1.7 Other savouries

In 2023, nutrition declaration and food label information were collected for 65 other savouries. Other savouries[11], which is a subcategory of the savouries category, is prioritised for the reduction of energy (calories) (20%), saturated fat (10%) and salt (10%). The energy (calories), saturated fat and salt content per 100 g is shown in Table 40.

Table 40 Energy (calories), saturated fat and salt content (per 100 g) of the other savouries food subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Other savouries (n=65)	mean (SD)	253.46 (64.67)	5.24 (4.05)	0.82 (0.33)
	median (IQR)	260 (50)	6.20 (7.20)	0.71 (0.56)
	min-max	67–404	0.20–13.30	0.30–1.65

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the other savouries category, 66.2% provided a suggested serving size, ranging from 15 g to 200 g. The energy (calories), saturated fat and salt content per suggested serving size is shown in Table 41.

[11] This includes products such as quiche, vol-au-vent, stuffing, breadcrumbs and dumplings.

Table 41 Energy (calories), saturated fat and salt content (per suggested serving size) of the other savouries food subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Other savouries (n=43)	mean (SD)	186.92 (127.89)	4.60 (4.88)	0.59 (0.38)
	median (IQR)	134 (198.28)	2.87 (7.89)	0.53 (0.43)
	min-max	32.70–514.90	0.07–16.15	0.07–1.75

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

8.2 Mintel Global New Products Database

The Mintel Global New Products Database (GNPD) (Mintel Group Ltd, 2024) was used to assess the nutrient content of new products placed on the Irish market within priority food categories collected in market snapshots.

As savouries were collected in the 2023 market snapshot, the median nutrient content of the savouries subcategories collected were compared to the median nutrient content of the new savouries subcategories placed on the Irish market in 2023.

The number of products collected within each savouries subcategory in the 2023 market snapshot were considerably higher than the number of Mintel GNPD products captured in 2023 (see Table 42) in the same categories. This was to be expected given that Mintel GNPD only captures new products placed on the market.

Table 42 Number of products with all target nutrients within each of the savouries subcategories captured in the market snapshot and by Mintel GNPD in 2023

Food category/subcategory	Market snapshot	Mintel GNPD
Pizza	203	19
Savoury pasta-based products	110	1
Savoury rice-based products	76	-
Savoury noodle-based products	103	5
Savoury couscous-based products	11	-
Other savouries	65	3

No new products were identified in Mintel GNPD for savoury rice-based products and savoury couscous-based products. As only one new product was identified for savoury pasta-based products, this subcategory was excluded from the analysis.

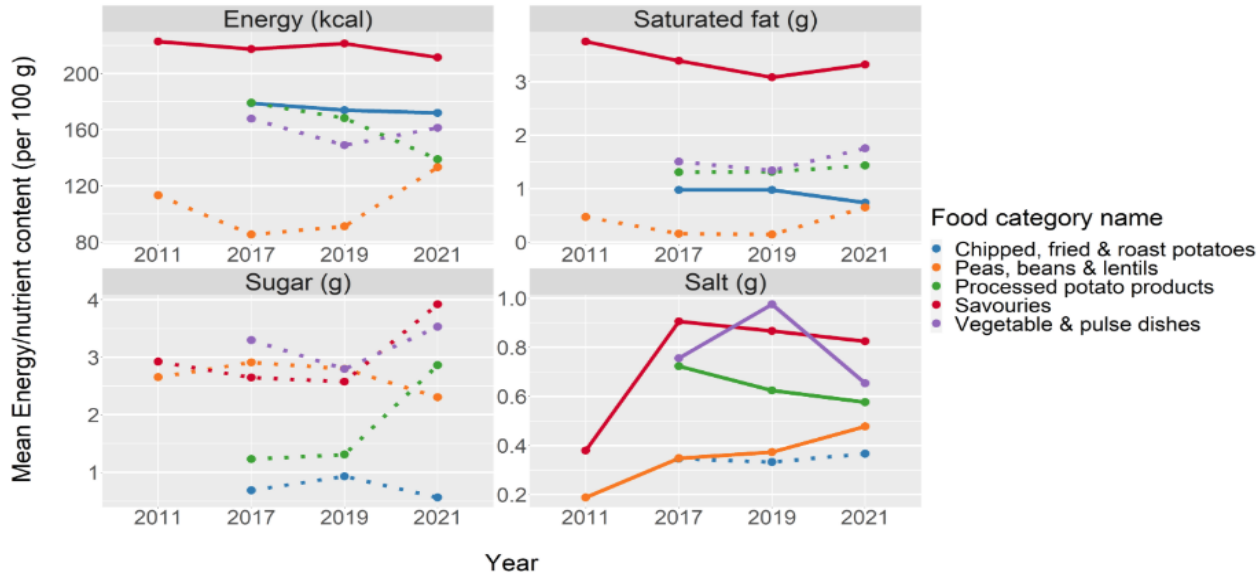
In comparison to the products captured in the market snapshot, the products identified by Mintel GNPD showed a trend towards:

- A lower energy (calories) (233.95 g/100 g in Mintel GNPD vs 246 g/100 g in market snapshot) and saturated fat (3.41 g/100 g in Mintel GNPD vs 3.70 g/100 g in market snapshot) in the pizza subcategory.
- A higher energy (calories) (383.84 g/100g in Mintel GNPD vs 260 g/100g in market snapshot), saturated fat (10.35 g/100g in Mintel GNPD vs 6.20 g/100g in market snapshot) and salt content (0.85 g/100g in Mintel GNPD vs 0.71 g/100g in market snapshot) in the other savouries subcategory
- A lower saturated fat (0.19 g/100g in Mintel GNPD vs 1.60 g/100g in market snapshot) in the savoury noodle-based products subcategory.

8.3 The Irish National Food Ingredient Database

The Irish National Food Ingredient Database (INFID) datasets have been used to determine trends in nutrient content across the priority food categories for food reformulation. Trends in energy (calories), saturated fat (g), sugar (g) and salt (g) per 100 g are shown for the vegetable, potato and savoury priority food categories. Trends are indicative and should be interpreted cautiously given that INFIDs 4, 5, 6 and 7 were collected as part of surveys of different population subgroups (see Table 1).

Energy and saturated fat content remained mostly stable or saw a slight decrease in all food categories. Between 2011 and 2017, there was an increase in the salt content of savouries; however, this declined from 2019. Salt increased in vegetable and pulse dishes between 2017 and 2019 but decreased in 2021. This is shown in Figure 9.



Note: Food categories represented with an unbroken line are prioritised for reformulation of the target nutrient, while food categories represented with a broken line are not prioritised for reformulation of the target nutrient.

Figure 9 Energy (calories) and target nutrient content trend graph per 100 g of vegetable, potato and savoury priority food categories between 2011 and 2021, based on INFID 4–7

Matched pair analysis using the INFID datasets provides an in-depth examination of the nutrient content of the same food product within a priority food category, over time. A detailed examination of the INFID 5 and 6 databases was carried out to identify matched pairs (matched pairs are the exact same products on the market in both years, the matching was completed using product name, manufacturer name and net weight) within the vegetable, potato and savoury priority food categories.

The nutrient content and percentage differences in the median energy (calories) and nutrient content of the vegetable, potato and savoury priority food categories, between 2017 and 2019, are presented in Table 43. As the number of matched pairs identified in some of the priority food categories was small, differences in the median energy (calories), saturated fat (g), sugar (g) and salt (g) content per 100 g between the matched pairs were analysed.

Table 43 Nutrient content and percentage change in the median energy (calories) and target nutrient content (per 100 g) of the vegetable, potato and savoury matched product pairs between 2017 and 2019

Priority food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Chipped, fried and roast potatoes (n=12)	**2017**				
	mean (SD)	**191.58 (40.83)**	**0.92 (0.76)**	0.75 (0.49)	0.34 (0.19)
	median (IQR)	**188.50 (60.75)**	**0.65 (0.40)**	0.55 (0.22)	0.35 (0.28)
	min-max	**129–246**	**0.30–3.20**	0.40–2.10	0.08–0.72
	2019				
	mean (SD)	**194 (40.69)**	**0.96 (0.74)**	0.74 (0.49)	0.37 (0.20)
	median (IQR)	**194.50 (66)**	**0.75 (0.33)**	0.50 (0.22)	0.35 (0.30)
	min-max	**134–246**	**0.40-3.20**	0.40–2.10	0.08–0.72
	% change (kcal or g)	**+3.18 (+6)**	**+15.38 (+0.10)**	-9.09 (-0.05)	0 (0)
Peas, beans and lentils (n=11)	**2017**				
	mean (SD)	83.27 (12.05)	0.15 (0.07)	3.53 (1.67)	**0.41 (0.32)**
	median (IQR)	80 (16)	0.20 (0.10)	3.60 (2.35)	**0.40 (0.65)**
	min-max	66–105	0–0.20	1.30-6.10	**0.01–0.80**
	2019				
	mean (SD)	82.45 (11.72)	0.13 (0.06)	3.45 (1.58)	**0.39 (0.320**
	median (IQR)	79 (12.50)	0.10 (0.10)	3.60 (2.35)	**0.40 (0.66)**
	min-max	66–105	0–0.20	1.20–5.90	**0.01–0.80**
	% change (kcal or g)	-1.25 (-1)	-50 (-0.10)	0 (0)	**0 (0)**
Processed potato products (n=7)	**2017**				
	mean (SD)	185.24 (32.74)	0.77 (0.34)	0.96 (0.42)	**0.71 (0.31)**
	median (IQR)	180 (39.50)	0.90 (0.25)	0.80 (0.45)	**0.75 (0.34)**
	min-max	139.70–230	0.10-1.10	0.50–1.70	**0.30–1.23**
	2019				
	mean (SD)	185.24 (32.74)	0.77 (0.34)	0.96 (0.42)	**0.71 (0.31)**
	median (IQR)	180 (39.50)	0.90 (0.25)	0.80 (0.45)	**0.75 (0.34)**
	min-max	139.70–230	0.10–1.10	0.50–1.70	**0.30–1.23**
	% change (kcal or g)	0 (0)	0 (0)	0 (0)	**0 (0)**
Savouries (n=14)	**2017**				
	mean (SD)	**200.14 (87.72)**	**2.60 (1.90)**	2.24 (1.19)	**0.90 (0.42)**

	median (IQR)	**245 (109)**	**2.70 (3.22)**	2.45 (1.38)	**0.90 (0.65)**
	min-max	**40–283**	**0–5**	0.50–4.30	**0.35–1.60**
	2019				
	mean (SD)	**199.43 (88.14)**	**2.62 (1.96)**	2.24 (1.09)	**0.93 (0.41)**
	median (IQR)	**245 (114.50)**	**2.45 (3.78)**	2.55 (1.55)	**0.90 (0.66)**
	min-max	**40–283**	**0–5**	0.60–3.90	**0.40–1.60**
	% change (kcal or g)	**0 (0)**	**-9.26 (-0.25)**	+4.08 (+0.10)	**0 (0)**

The nutrients targeted for reformulation in each food category are in bold text.
SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum.

Between 2017 and 2019, changes in the energy (calories) and target nutrient content per 100 g were observed across different vegetable, potato and savoury priority food categories as follows:

- For the chipped, fried and roast potatoes matched pairs there was a 3.18% (6 kcal) increase in the energy and a 15.38% (0.10 g) increase in the saturated fat content per 100 g
- For the peas, beans and lentils matched pairs there was no change in the salt content per 100 g
- For the processed potato products matched pairs there was no change in the salt content per 100 g
- For the savouries matched pairs there was a 9.26% (0.25 g) reduction in the saturated fat content and no change in the energy and salt content per 100 g.

While some progress in the median saturated fat (savouries) content was observed in products that remained on the market between 2017 and 2019, increases in the target nutrients were also seen. Therefore, continued reformulation efforts are needed by the food industry.

A visual summary of percentage changes in median nutrient content of the matched pairs in all the priority food categories in 2017 and 2019 is provided in Appendix 3.

8.4 Laboratory analysis and nutrition declaration verification

This section outlines the results of the laboratory analysis and nutrition declaration verification undertaken for salt in pizzas (a subcategory of the savouries category) sold in the foodservice/OOH sector.

In September 2023, the FRT carried out a survey to determine the salt content (g/100 g, g/pizza, g/slice) of pizzas sold in the foodservice sector[12] in Ireland. The purpose of this survey was to establish a 2023 benchmark of the salt content of pizza sold in Irish foodservice outlets which was subsequently used to establish maximum per serving salt targets for pizza sold in the foodservice sector.

A convenience sample[13] of 60 (n=47 adult's pizzas and n=13 children's pizzas) pizzas were sampled from restaurants (n=7) and takeaways (n=7). Three subcategories of pizzas were prioritised for sampling based on their popularity on menus, including, cheese-only pizza[14], pizza with pepperoni, salami, meatballs, beef, or sausage[15], and pizza with other toppings[16]. Of the pizzas sampled, n=16 (n=12 adult's pizzas and n=4 children's pizzas) were cheese-only pizzas, n=25 (n=21 adult's pizzas and n=4 children's pizzas) were pizzas with pepperoni, salami, meatballs, beef or sausage, and n=19 (n=14 adult's pizzas and n=5 children's pizzas) were pizzas with other toppings. All samples were analysed by GPAL using an in-house validated analytical method, as referred in the Schedule of Accreditation Irish National Accreditation Board Registration Number: 9T.

In addition, nutrition declaration verification analysis was undertaken in relation to salt. The EC guideline nutrition labelling tolerances for salt are defined as a tolerance of ± 0.375 g if the product contains <1.25 g of salt per 100 g, and a tolerance of ± 20% if the product contains ≥1.25 g of salt per 100 g (European Commission, 2012).

8.4.1 Laboratory analysis results

The mean salt content of adult's pizza was 1.46 g/100 g, and for children's pizza was 1.37 g/100 g. The pizza with pepperoni, salami, meatballs, beef, or sausage subcategory had the highest mean salt content for both adult's and children's pizza, at 1.63 g/100 g and 1.51 g/100 g, respectively. The results of the analysis per 100 g are outlined in Table 44.

[12] Foodservice or out-of-home (OOH) sector are terms commonly used to describe any establishment where food and drink are prepared for immediate consumption outside the home.
[13] Please note that there was no specific randomised approach employed for sampling.
[14] Samples of cheese-only pizza include plain classic margherita, mozzarella, or a single cheese and tomato-based pizza without any additional toppings.
[15] Samples of pizza with pepperoni, salami, meatballs, beef, or sausage, either individually or in various combinations of these meat toppings. If a pizza includes ham in addition to any of these specified meat toppings such as pepperoni, salami, meatballs, beef, or sausage, it is classified within this subcategory.
[16] Samples of pizza with other toppings include pizza topped with ingredients such as chicken, ham, pineapple, fruits, or vegetables. This subcategory also includes Four Cheese-based pizzas, due to their variety of cheeses and higher salt content.

Table 44 Analysed salt content per 100 g of pizza sold by a sample of foodservice outlets in 2023

			Salt content in pizza per 100 g[(a)]		
Population type	**Pizza subcategory**	**(n)**	**Mean (SD) salt content**	**Median (IQR) salt content**	**Min-max salt content**
Adults	All categories	47	1.46 (0.25)	1.47 (0.30)	0.97–2.08
	Cheese-only	12	1.37 (0.17)	1.42 (0.21)	1.02–1.60
	Pepperoni, salami, meatballs, beef, or sausage	21	1.63 (0.22)	1.57 (0.30)	1.30–2.08
	Other toppings	14	1.28 (0.21)	1.28 (0.29)	0.97–1.60
Children	All categories	13	1.37 (0.28)	1.35 (0.33)	0.91–1.88
	Cheese-only	4	1.26 (0.23)	1.19 (0.13)	1.07–1.60
	Pepperoni, salami, meatballs, beef, or sausage	4	1.51 (0.25)	1.41 (0.19)	1.35–1.88
	Other toppings	5	1.34 (0.33)	1.24 (0.30)	0.91–1.78

Data provided as mean and standard deviation (SD), median and interquartile range (IQR), and minimum and maximum values (min-max).
[(a)] All foodservice pizza samples were analysed as sold.

Both adult's and children's pizza varied in size and weight. The size of an adult's pizza varied from 9 to 14.5 inches in diameter, with the average being 11.5 inches. The weight of an adult's pizza ranged from 280 g to 719 g, with an average whole pizza weighing 500 g. The weight of a pizza slice also varied, ranging from 36 g to 167 g, with the average pizza slice weighing 72 g. The size of children's pizza ranged from 5.5 to 10.3 inches in diameter, with an average whole pizza measuring 7.6 inches in diameter. In terms of weight, the weight of a child's whole pizza ranged from 110 g to 384 g, with an average of 202 g. The weight of a pizza slice also varied, ranging from 25 g to 136 g, with an average slice weighing 58 g.

The adult whole pizza with pepperoni, salami, meatballs, beef, or sausage had the highest mean salt content of 8.44 g/pizza. The children's whole pizza with other toppings had the highest mean salt content of 2.87 g/pizza. These results are provided in Table 45. Additional information on this

analysis can be found in *Food Reformulation Task Force: Benchmarking the salt content of pizza sold in the foodservice sector in 2023* (Food Safety Authority of Ireland, 2024c).

Table 45 Analysed salt content per portion of pizza sold by a sample of foodservice outlets in 2023

Salt content in pizza per portion[(a)]			per whole pizza (g/pizza)			per pizza slice (g/slice)		
Population type	**Pizza subcategory**	**(n)**	**Mean (SD) salt content**	**Median (IQR) salt content**	**Min-max salt content**	**Mean (SD) salt content**	**Median (IQR) salt content**	**Min-max salt content**
Adults	All categories	47	7.27 (2.02)	7.28 (3.16)	3.34–11.01	1.05 (0.45)	0.99 (0.41)	0.43–2.80
	Cheese-only	12	5.92 (1.69)	6.63 (3.06)	3.34–8.05	0.85 (0.32)	0.80 (0.30)	0.43–1.55
	Pepperoni, salami, meatballs, beef or sausage	21	8.44 (1.92)	8.66 (2.00)	4.54–11.01	1.17 (0.46)	1.12 (0.42)	0.55–2.80
	Other toppings	14	6.69 (1.46)	6.80 (1.73)	4.63–9.44	1.03 (0.49)	0.92 (0.28)	0.59–2.61
Children	All categories	13	2.73 (1.10)	2.39 (1.95)	1.31–4.68	0.79 (0.43)	0.64 (0.46)	0.38–1.87
	Cheese-only	4	2.60 (1.24)	2.64 (1.92)	1.31–3.82	0.83 (0.37)	0.77 (0.40)	0.47–1.31
	Pepperoni, salami, meatballs, beef or sausage	4	2.69 (0.94)	2.43 (0.60)	1.87–4.04	0.94 (0.65)	0.72 (0.65)	0.45–1.87
	Other toppings	5	2.87 (1.33)	2.09 (1.90)	1.69–4.68	0.63 (0.27)	0.49 (0.34)	0.38–1.03

Data presented as mean and standard deviation (SD), median and interquartile range (IQR), and minimum and maximum values (min-max).

[(a)] All foodservice pizza samples were analysed as sold

8.4.2 Nutrition declaration verification results

The conformance of the laboratory-analysed salt content of pizzas sold in foodservice outlets with the EC guideline nutrition labelling tolerances was assessed. Of the n=19 pizzas with a declared salt content, 84.2% (n=16) were conformant with the EC guideline nutrition labelling tolerances for salt. Of the 15.8% (n=3) pizzas that were non-conformant with the EC guideline salt labelling tolerance, two were above the upper tolerance and one was below the lower tolerance. This is shown in Figure 10.

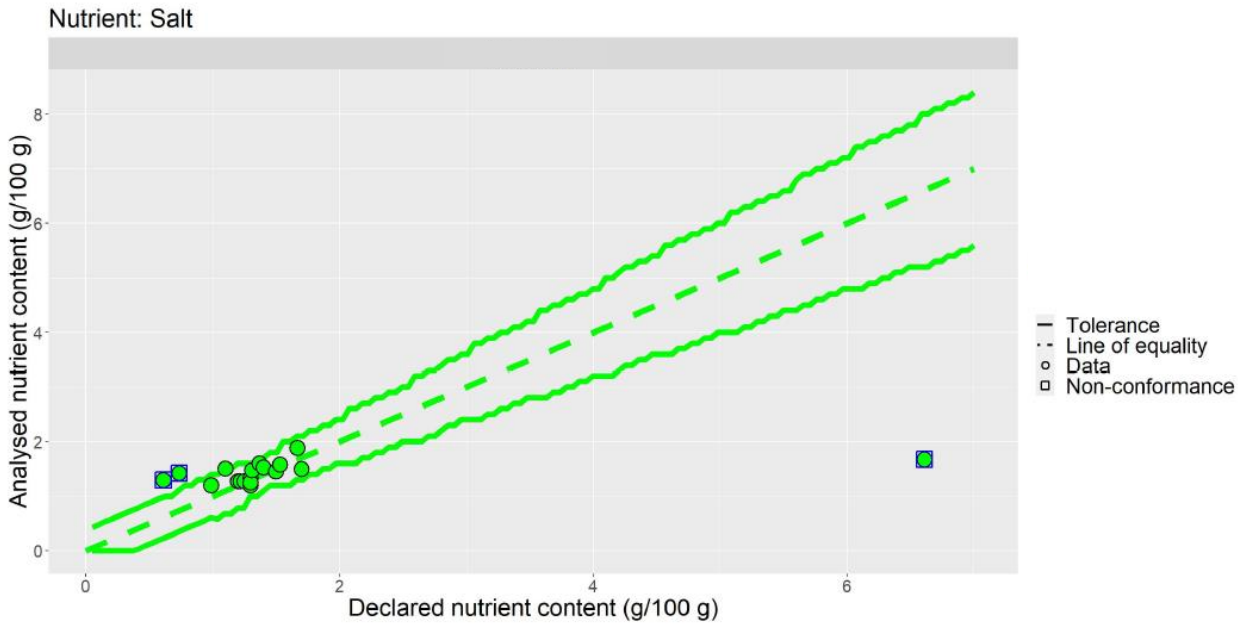


Figure 10 Trend in salt nutrition labelling tolerances for foodservice pizzas in 2023

When the salt content of pizza was declared on foodservice menus (n=19) the accuracy was good, with 84.2% conformance with the EC guideline tolerances. However, it is notable that the majority of the pizzas sampled (n=41) had no declared salt content available. The FSAI recommends "structures and methods to monitor the salt content of processed food and food prepared in the foodservice sector", as described in the *Salt and Health: Review of the Scientific Evidence and Recommendations for Public Policy in Ireland (Revision 1)* report (Food Safety Authority of Ireland, 2016). As well as this, the World Health Organization (WHO) recommends that "menu labelling in foodservice facilities enable healthier consumer choices" (World Health Organization, 2023). Therefore, due to the considerable variation in the salt content of pizza (as outlined in the *Food Reformulation Task Force: Benchmarking the salt content of pizza sold in the foodservice sector in 2023* report) (Food Safety Authority of Ireland, 2024c), the salt content of pizza should be declared in store, on menus and online in the case of takeaway allowing consumers to make an informed decisions about the salt content of pizza.

9. Meat and fish priority food categories

The priority food categories grouped into meat and fish are as follows:

1. Bacon and ham
2. Beef and veal
3. Chicken, turkey and game
4. Fish and fish products.

No Mintel GNPD, nutrition declaration verification analysis, foodservice/OOH sector analysis or research has been undertaken in the meat and fish priority food categories.

Subcategories of some of these priority food categories have been included in sodium and potassium sampling which has been ongoing in the FSAI since 2003 and the results can be found in *Monitoring Sodium and Potassium in Processed Foods* (Food Safety Authority of Ireland, 2023c).

9.1 Market snapshots

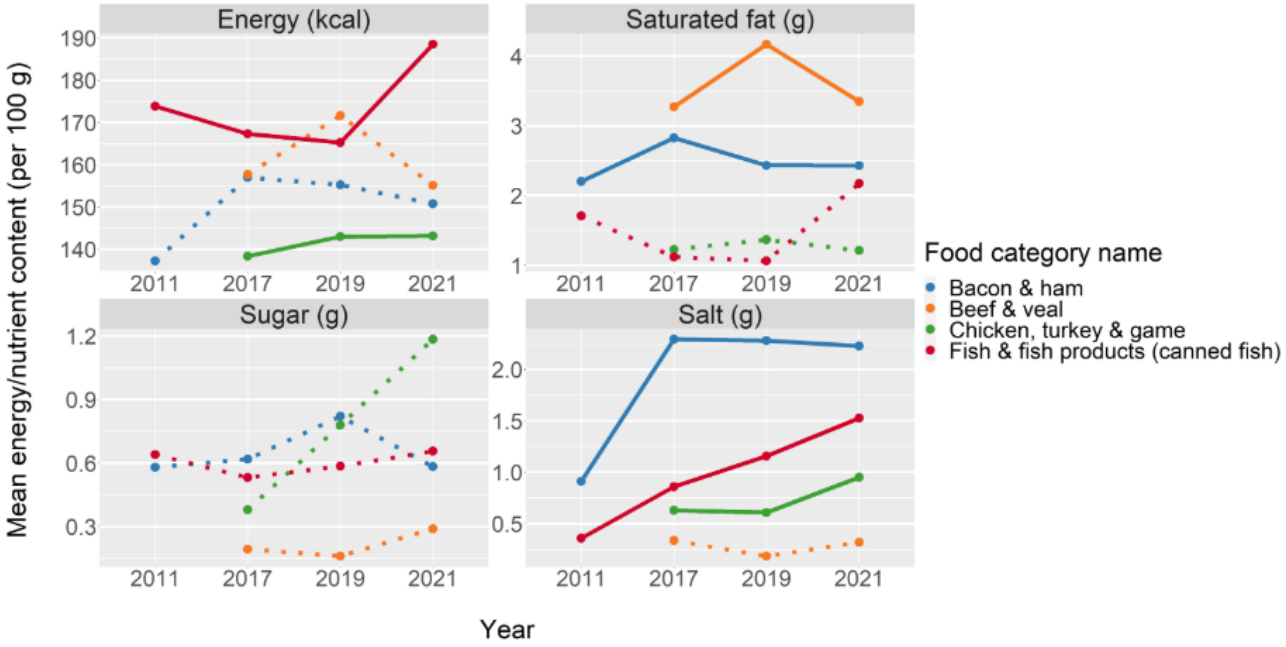
In 2021, market snapshots were carried out for bacon and ham, beef and veal and chicken, turkey and game categories. The nutrient content of these products were reported in *The Food Reformulation Task Force Progress Report 2023* (Food Safety Authority of Ireland, 2024b) and can be found in Appendix 1. The bacon and ham, beef and veal and chicken, turkey and game categories were included in the 2024 market snapshot and the changes in the nutrient content of this category between 2021 and 2024 will be reported in the 2025 progress report.

9.2 The Irish National Food Ingredient Database

The Irish National Food Ingredient Database (INFID) datasets have been used to determine trends in nutrient content across the priority food categories for food reformulation. Trends in energy (calories), saturated fat (g), sugar (g) and salt (g) per 100 g, are shown for the meat and fish priority food categories. Trends are indicative and should be interpreted cautiously given that INFIDs 4, 5, 6 and 7 were collected as part of surveys of different population subgroups (see Table 1).

There was a trend towards a decrease in the energy content of fish and fish products between 2011 and 2019, however this increased notably in 2021. These products also saw a consistent increase in salt content between 2011 and 2021. There was a trend towards an increase in the saturated fat content of beef and veal foods between 2017 and 2019, but this decreased in 2021. The was a trend

towards an increase salt content in chicken, turkey and game between 2019 and 2021. This is shown in Figure 11.



Note: Food categories represented with an unbroken line are prioritised for reformulation of the target nutrient, while food categories represented with a broken line are not prioritised for reformulation of the target nutrient.

Figure 11 Energy (calories) and target nutrient content trend graph per 100 g of meat and fish priority food categories between 2011 and 2021, based on INFID 4–7

Matched pair analysis using the INFID datasets provides an in-depth examination of the nutrient content of the same food product within a priority food category, over time. A detailed examination of the INFID 5 and 6 databases was carried out to identify matched pairs (matched pairs are the exact same products on the market in both years, the matching was completed using product name, manufacturer name and net weight) within the meat and fish priority food categories.

The nutrient content and percentage differences in the median energy (calories) and nutrient content of the meat and fish priority food categories, between 2017 and 2019, are presented in Table 46. As the number of matched pairs identified in some of the priority food categories was small, differences in the median energy (calories), saturated fat (g), sugar (g) and salt (g) content per 100 g between the matched pairs were analysed.

Table 46 Nutrient content and percentage change in the median energy (calories) and target nutrient content (per 100 g) of the meat and fish matched product pairs between 2017 and 2019

Priority food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Bacon and ham (n=23)	**2017**				
	mean (SD)	156.83 (103.85)	**2.24 (1.93)**	0.60 (0.27)	**2.13 (0.04)**
	median (IQR)	116 (70.50)	**1 (2.75)**	0.50 (0.30)	**1.90 (0.70)**
	min-max	96–589	**0.50–6.40**	0.10–1	**1.60–2.85**
	2019				
	mean (SD)	161.65 (104.83)	**2.35 (2)**	0.64 (0.26)	**2.13 (0.40)**
	median (IQR)	126 (77.50)	**1 (3)**	0.60 (0.30)	**2 (0.62)**
	min-max	89–598	**0.60–6.40**	0.20–1.10	**1.60–2.85**
	% change (kcal or g)	+8.62 (+10)	**0 (0)**	+20 (+0.10)	**+5.26 (+0.10)**
Chicken, turkey and game (n=6)	**2017**				
	mean (SD)	**130.17 (40.05)**	1.20 (1.48)	0.38 (0.32)	**0.19 (0.08)**
	median (IQR)	**106 (37.50)**	0.30 (1.43)	0.50 (0.38)	**0.15 (0.02)**
	min-max	**106–201**	0.30–3.80	0–0.80	**0.15–0.34**
	2019				
	mean (SD)	**130.17 (40.05)**	1.20 (1.48)	0.55 (0.12)	**0.19 (0.08)**
	median (IQR)	**106 (37.50)**	0.30 (1.43)	0.50 (0)	**0.15 (0.02)**
	min-max	**106–201**	0.30-3.80	0.50–0.80	**0.15–0.34**
	% change (kcal or g)	**0 (0)**	0 (0)	0 (0)	**0 (0)**
Fish and fish products (canned fish) (n=9)	**2017**				
	mean (SD)	**199.11 (56.15)**	1.39 (0.95)	0.67 (0.60)	**0.40 (0.25)**
	median (IQR)	**211 (50)**	1.10 (1.30)	0.50 (1.10)	**0.40 (0.41)**
	min-max	**96–246**	0.10–3	0.10–1.50	**0.08–0.83**
	2019				
	mean (SD)	**192.67 (51.28)**	1.33 (0.91)	0.53 (0.49)	**0.54 (0.40)**
	median (IQR)	**211 (25)**	1 (1.30)	0.50 (0.70)	**0.53 (0.71)**
	min-max	**97–243**	0.50–3	0.10–1.50	**0.08–1.20**
	% change (kcal or g)	**0 (0)**	-9.09 (-0.10)	0 (0)	**+32.50 (+0.13)**

The nutrients targeted for reformulation in each food category are in bold text.
SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum.

Between 2017 and 2019, changes in the energy (calories) and target nutrient content per 100 g were observed across different meat and fish priority food categories as follows:

- For the bacon and ham matched pairs there was no change in saturated fat and a 5.26% (0.10 g) increase in the salt content per 100 g
- For the chicken, turkey and game matched pairs there was no change in the energy or salt content per 100 g
- For the fish and fish products matched pairs there was a 32.50% (0.13 g) increase in the salt content and no change in the energy content per 100 g.

Increases in the target nutrients were seen in products that remained on the market between 2017 and 2019. Therefore, continued reformulation efforts are needed by the food industry.

A visual summary of percentage changes in median nutrient content of the matched pairs in all the priority food categories in 2017 and 2019 are provided in Appendix 3.

10. Meat-based products and convenience foods priority food categories

The priority food categories grouped into meat-based products and convenience foods are as follows:

1. Beef and veal ready meals
2. Burgers
3. Meat pies and pastries
4. Meat products
5. Poultry and game ready meals
6. Sausages.

No Mintel GNPD, nutrition declaration verification analysis, foodservice/OOH sector analysis or research has been undertaken in the meat-based products and convenience foods priority food categories. This will be addressed in future work of the task force.

Some of these priority food categories and their subcategories have been included in sodium and potassium sampling which has been ongoing in the FSAI since 2003 and the results can be found in *Monitoring Sodium and Potassium in Processed Foods* (Food Safety Authority of Ireland, 2023c).

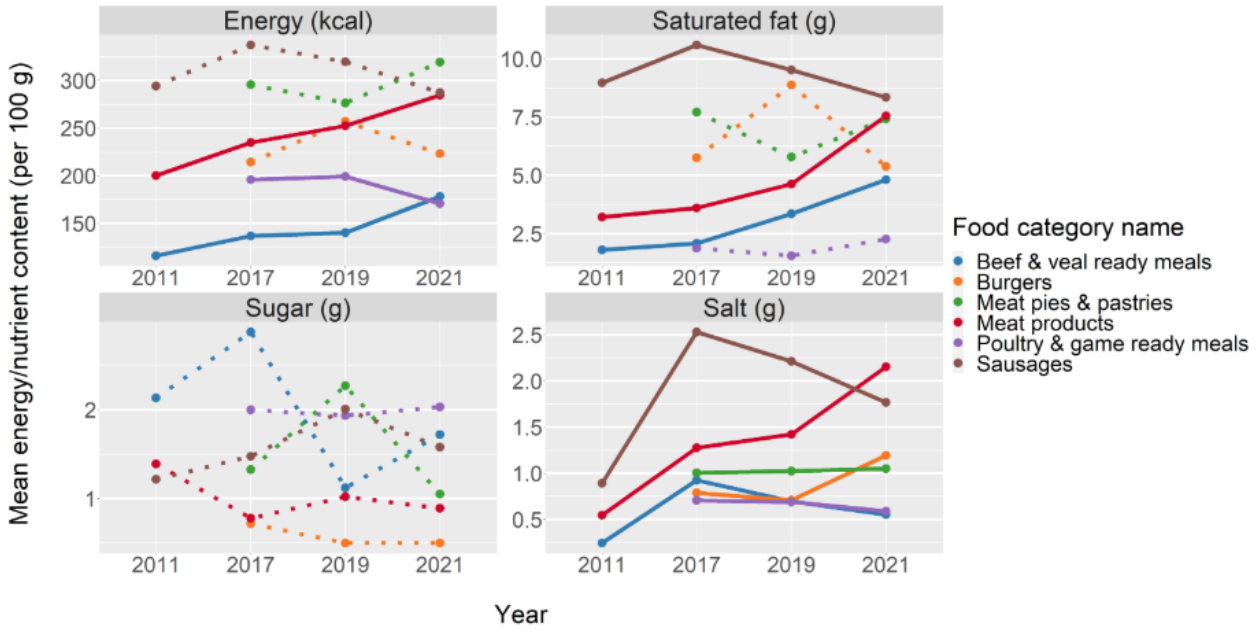
10.1 Market snapshots

In 2021, market snapshots were carried out for the sausages priority food category within this group and the nutrient content of these products were reported in *The Food Reformulation Task Force Progress Report 2023* (Food Safety Authority of Ireland, 2024b) and can be found in Appendix 2. Sausages were included in the 2024 market snapshot and the changes in the nutrient content of this category between 2021 and 2024 will be reported in the 2025 progress report.

10.2 The Irish National Food Ingredient Database

The Irish National Food Ingredient Database (INFID) datasets have been used to determine trends in nutrient content across the priority food categories for food reformulation. Trends in energy (calories), saturated fat (g), sugar (g) and salt (g) per 100 g, are shown for the meat-based products and convenience foods priority food categories. Trends are indicative and should be interpreted cautiously given that INFIDs 4, 5, 6 and 7 were collected as part of surveys of different population subgroups (see Table 1).

There was a trend towards an increase in the energy, salt, and saturated fat content of meat products between 2011 and 2021. Burgers also had a trend towards increased salt content between 2019 and 2021. Salt reduced or remained stable in all other food categories between 2017 and 2021. Beef and veal ready meals saw a trend towards an increase in energy and saturated fat content between 2011 and 2021. There was a trend towards a reduction in the saturated fat and salt content in sausages between 2017 and 2021. This is shown in Figure 12.



Note: Food categories represented with an unbroken line are prioritised for reformulation of the target nutrient, while food categories represented with a broken line are not prioritised for reformulation of the target nutrient.

Figure 12 Energy (calories) and target nutrient content trend graph per 100 g of meat-based products and convenience priority food categories between 2011 and 2021, based on INFID 4–7

Matched pair analysis using the INFID datasets provides an in-depth examination of the nutrient content of the same food product within a priority food category, over time. A detailed examination of the INFID 5 and 6 databases was carried out to identify matched pairs (matched pairs are the exact same products on the market in both years, the matching was completed using product name, manufacturer name and net weight) within the meat-based products and convenience foods priority food categories.

In this grouping, matched pairs were only identified for meat products and sausages. The nutrient content and percentage differences in the median energy (calories) and nutrient content of the meat products and sausages priority food categories, between 2017 and 2019, are presented in Table 47. As the number of matched pairs identified in some of the priority food categories was small, differences in the median energy (calories), saturated fat (g), sugar (g) and salt (g) content per 100 g between the matched pairs were analysed.

Table 47 Nutrient content and percentage change in the median energy (calories) and target nutrient content (per 100 g) of the meat-based products and convenience foods matched product pairs between 2017 and 2019

Priority food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Meat products (n=18)	**2017**				
	mean (SD)	**264.83 (107.58)**	**5.58 (6.11)**	0.83 (0.38)	**1.61 (1.21)**
	median (IQR)	**236.50 (55.25)**	**2.80 (5.20)**	0.65 (0.73)	**1.04 (1.96)**
	min-max	**114–502**	**0.30–18**	0.50–1.60	**0.40–3.90**
	2019				
	mean (SD)	**264.83 (106.87)**	**5.65 (6.23)**	0.90 (0.39)	**1.61 (1.20)**
	median (IQR)	**243.50 (61.25)**	**2.75 (5.35)**	0.80 (0.63)	**0.93 (1.68)**
	min-max	**122–496**	**0.90–19**	0.50–1.70	**0.60–4**
	% change (kcal or g)	**+2.96 (+7)**	**-1.79 (-0.05)**	+23.08 (+0.15)	**-10.58 (-0.11)**
Sausages (n=6)	**2017**				
	mean (SD)	300.17 (28.92)	**9.20 (1.06)**	1.77 (0.89)	**1.83 (0.20)**
	median (IQR)	304.50 (49.25)	**9.10 (1.12)**	1.85 (1.35)	**1.79 (0.27)**
	min-max	266–332	**8.10–11**	0.50 –2.70	**1.60–2.10**
	2019				
	mean (SD)	300.17 (28.92)	**9.20 (1.06)**	1.77 (0.89)	**1.83 (0.20)**
	median (IQR)	304.50 (49.25)	**9.10 (1.12)**	1.85 (1.35)	**1.79 (0.27)**
	min-max	266–332	**8.10–11**	0.50–2.70	**1.60–2.10**
	% change (kcal or g)	0 (0)	**0 (0)**	0 (0)	**0 (0)**

The nutrients targeted for reformulation in each food category are in bold text.
SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum.

Between 2017 and 2019, changes in the energy (calories) and target nutrient content per 100 g were observed across meat products and sausages categories as follows:

- For the meat products matched pairs there was a 2.96% (7 kcal) increase in the energy, a 1.79% (0.05 g) reduction in the saturated fat and a 10.58% (0.11 g) reduction in the salt content per 100 g
- For the sausages matched pairs there was no change in saturated fat or salt content per 100 g.

While some progress in the meat products category was observed in products that remained on the market between 2017 and 2019, continued reformulation efforts in this group of priority food categories is needed by the food industry.

A visual summary of percentage changes in median nutrient content of the matched pairs in all the priority food categories in 2017 and 2019 are provided in Appendix 3.

11. Other products priority food categories

The priority food categories grouped into other products are as follows:

1. Nuts, seed, herbs and spices
2. Soups, sauces and miscellaneous foods.

No market snapshot, Mintel GNPD, foodservice/OOH sector analysis or research has been undertaken for the nuts, seeds, herbs and spices priority food categories.

These subcategories have also been included in sodium and potassium sampling which has been ongoing in the FSAI since 2003 and the results can be found in *Monitoring Sodium and Potassium in Processed Foods* (Food Safety Authority of Ireland, 2023c).

11.1 Market snapshots

In 2023, soups, sauces and miscellaneous foods were included in a market snapshot and these results are outlined in this section.

11.1.1 Soups, sauces and miscellaneous foods

In 2023, nutrition declaration and food label information were collected for 1,479 soups, sauces and miscellaneous foods. Soups, sauces and miscellaneous foods are prioritised for the reduction of energy (calories) (20%), saturated fat (10%), sugar (20%) and salt (10%). The energy (calories), saturated fat, sugar and salt content per 100 g or ml is shown in Table 48.

Table 48 Energy (calories), saturated fat, sugar and salt content (per 100 g or ml) of the soups, sauces and miscellaneous foods category in 2023

Food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Soups, sauces & miscellaneous foods (n=1479)	mean (SD)	170.67 (159.47)	1.99 (3.17)	8.31 (10.24)	2.66 (4.17)
	median (IQR)	107 (204.50)	0.80 (2.50)	4.70 (7.70)	1 (1.37)
	min-max	1–728	0–44.30	0–80	0–30.7

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the soups, sauces and miscellaneous foods category, 68.8% provided a suggested serving size, ranging from 2 g or ml to 450 g or ml. The energy (calories), saturated fat, sugar and salt content per suggested serving size is shown in Table 49.

Table 49 Energy (calories), saturated fat, sugar and salt content (per suggested serving size) of the soups, sauces and miscellaneous foods[(a)] food category in 2023

Food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Soups, sauces & miscellaneous foods (n=1017)	mean (SD)	73.39 (61.20)	1.04 (1.72)	3.83 (4.22)	0.81 (0.65)
	median (IQR)	59.70 (72.40)	0.40 (1.02)	2.50 (4.85)	0.72 (0.81)
	min-max	0.44–443.75	0–19.05	0–42.50	0–4.75

[(a)] Products providing nutritional information and suggested serving sizes for the dried products were removed if there was no information on the packet captured to calculate the weight of the portion as consumed (n=30). This data is available on request from the FRT.
SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

For the purposes of this report in order to further analyse this priority food category, the soups, sauces and miscellaneous foods category has been subcategorised into the following: soups[17]; sauces[18]; and miscellaneous foods[19].

11.1.2 Soups

In 2023, nutrition declaration and food label information were collected for 250 soups. Soups, which is a subcategory of the soups, sauces and miscellaneous foods category, is prioritised for the

[17] This included canned, fresh, ambient, pouch and dry packet soups. For dried soups, where possible, nutrient content was determined and report as ready for consumption.
[18] This included jar, pouch, tub cooking sauces, condiments, dipping sauces and dry packet sauces. For dried sauces, where possible, nutrient content was determined and report as ready for consumption.
[19] This included stock cubes, gravy granules and stock pots. Where possible, nutrient content was determined and report as ready for consumption.

reduction of energy (calories) (20%), saturated fat (10%), sugar (20%) and salt (10%). The energy (calories), saturated fat, sugar and salt content per 100 g or ml is shown in Table 50.

Table 50 Energy (calories), saturated fat, sugar and salt content (per 100 g or ml) of the soups food subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Soups (n=250)	mean (SD)	72.79 (92.60)	1.40 (2.08)	3.22 (4.05)	1.34 (2.57)
	median (IQR)	46 (27.75)	0.60 (1.67)	2.10 (2.40)	0.60 (0.20)
	min-max	16–473	0–13.70	0.10–22.60	0.14–13.50

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the soups subcategory, 79.6% provided a suggested serving size, ranging from 187 g or ml to 400 g or ml. The energy (calories), saturated fat, sugar and salt content per suggested serving size is shown in Table 51.

Table 51 Energy (calories), saturated fat, sugar and salt content (per suggested serving size) of the soups[(a)] food subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Soups (n=199)	mean (SD)	102.61 (51.37)	1.74 (1.88)	4.74 (3.66)	1.51 (0.62)
	median (IQR)	92 (48.50)	1 (2)	3.60 (4.65)	1.30 (0.60)
	min-max	36–428	0–11.60	0.25–20.40	0.07–4.12

[(a)] Products providing nutritional information and suggested serving sizes for the dried products were removed if there was no information on the packet captured to calculate the weight of the portion as consumed (n=7). This data is available on request from the FRT.
SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

11.1.3 Sauces

In 2023, nutrition declaration and food label information were collected for 1,122 sauces. Sauces, which is a subcategory of the soups, sauces and miscellaneous foods category, is prioritised for the reduction of energy (calories) (20%), saturated fat (10%), sugar (20%) and salt (10%). The energy (calories), saturated fat, sugar and salt content per 100 g or ml is shown in Table 52.

Table 52 Energy (calories), saturated fat, sugar and salt content (per 100 g or ml) of the sauces food subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Sauces (n=1122)	mean (SD)	194.74 (162.64)	2.08 (3.28)	9.79 (10.99)	2.47 (3.50)
	median (IQR)	136 (195.75)	0.90 (2.80)	5.50 (8.90)	1.20 (1.40)
	min-max	1–728	0–44.30	0–80	0–26.70

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the sauces category, 65.0% provided a suggested serving size, ranging from 2 g or ml to 285 g or ml. The energy (calories), saturated fat, sugar and salt content per suggested serving size is shown in Table 53.

Table 53 Energy (calories), saturated fat, sugar and salt content (per suggested serving size) of the sauces[(a)] food category in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Sauces (n=729)	mean (SD)	72.57 (61.98)	0.92 (1.72)	3.99 (4.42)	0.62 (0.51)
	median (IQR)	56.25 (69.75)	0.35 (0.86)	2.64 (5.03)	0.53 (0.61)
	min-max	0.44–443.75	0–19.05	0–42.5	0–4.75

[(a)] Products providing nutritional information and suggested serving sizes for the dried products were removed if there was no information on the packet captured to calculate the weight of the portion as consumed (n=20). This data is available on request from the FRT.
SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

11.1.4 Miscellaneous foods

In 2023, nutrition declaration and food label information were collected for 107 miscellaneous foods. Miscellaneous foods[20], which is a subcategory of the soups, sauces and miscellaneous foods category, is prioritised for the reduction of energy (calories) (20%), saturated fat (10%), sugar (20%) and salt (10%). The energy (calories), saturated fat, sugar and salt content per 100 g or ml is shown in Table 54.

[20] This includes products such as stock cubes and gravy granules.

Table 54 Energy (calories), saturated fat, sugar and salt content (per 100 g or ml) of the miscellaneous food subcategory in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Miscellaneous foods (n=107)	mean (SD)	146.99 (159.37)	2.49 (3.92)	4.68 (6.91)	7.63 (8.21)
	median (IQR)	59 (312.50)	1 (2.15)	1.30 (6.35)	1 (13.28)
	min-max	4–460	0–21.1	0.05–31.20	0–30.70

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

Of the miscellaneous category, 83.2% provided a suggested serving size, ranging from 50 g or ml to 450 g or ml. The energy (calories), saturated fat, sugar and salt content per suggested serving size is shown in Table 55.

Table 55 Energy (calories), saturated fat, sugar and salt content (per suggested serving size) of the miscellaneous food[(a)] category in 2023

Food subcategory	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Miscellaneous foods (n=89)	mean (SD)	14.78 (10.99)	0.35 (0.35)	0.44 (0.51)	0.81 (0.67)
	median (IQR)	13 (10)	0.30 (0.30)	0.25 (0.25)	0.77 (0.49)
	min-max	4–61.6	0–1.60	0.05–3.40	0–4.16

[(a)] Products providing nutritional information and suggested serving sizes for the dried products were removed if there was no information on the packet captured to calculate the weight of the portion as consumed (n=3). This data is available on request from the FRT.
SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum

11.2 Mintel Global New Products Database

The Mintel Global New Products Database (GNPD) (Mintel Group Ltd, 2024) was used to assess the nutrient content of new products placed on the Irish market within priority food categories collected in market snapshots.

As soups, sauces and miscellaneous foods were collected in the 2023 market snapshot, the median nutrient content of the soups, sauces and miscellaneous foods subcategories collected were compared to the median nutrient content of the new soups, sauces and miscellaneous foods subcategories placed on the Irish market in 2023.

The number of products collected within each soups, sauces and miscellaneous foods subcategory in the 2023 market snapshot was considerably higher than the number of Mintel GNPD products captured in 2023 (see Table 56) in the same categories. This was to be expected given that Mintel GNPD only captures new products placed on the market.

Table 56 Number of products with all target nutrients within each of the soups, sauces and miscellaneous foods subcategories captured in the market snapshot and by Mintel GNPD in 2023

Food category/subcategory	Market snapshot	Mintel GNPD
Soups	250	14
Sauces	1122	81
Miscellaneous foods	107	4

In comparison to the products captured in the market snapshot, the products identified by Mintel GNPD showed a trend towards:

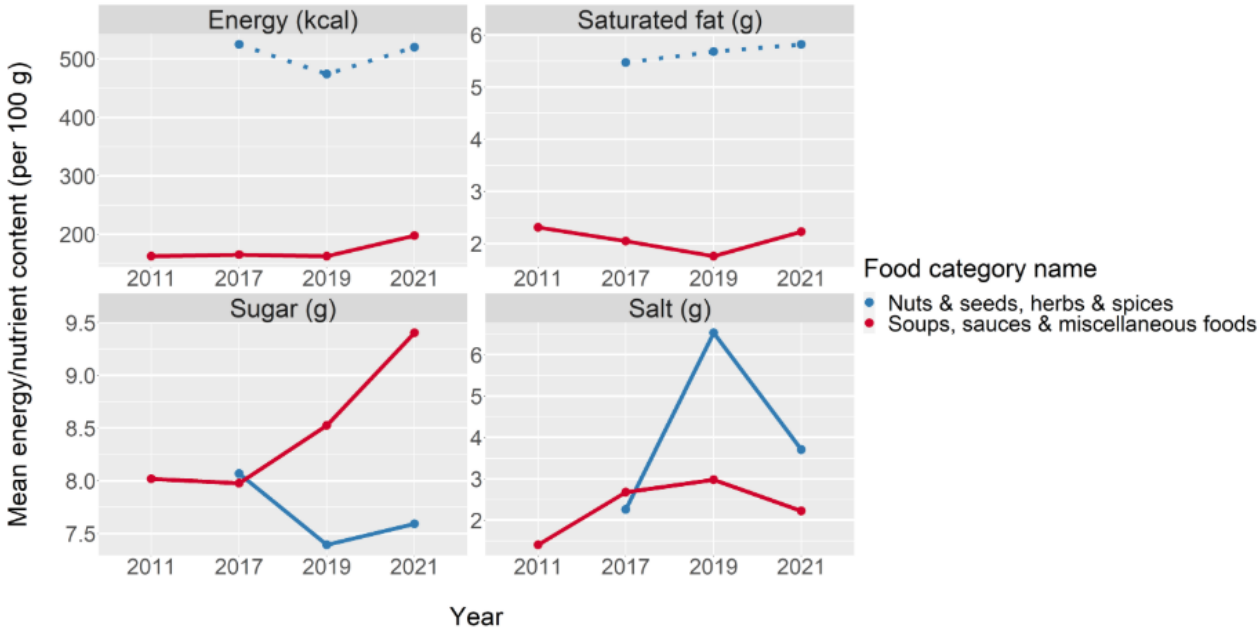
- Higher energy (calories) (59.30 g/100g in Mintel GNPD vs 46 g/100g in market snapshot) and saturated fat content (0.89 g/100g in Mintel GNPD vs 0.60 g/100g in market snapshot) in the soups subcategory
- A lower sugar content (1.61 g/100g in Mintel GNPD vs 2.10 g/100g in market snapshot) in the soups subcategory
- A higher saturated fat (2.15 g/100g in Mintel GNPD vs 0.90 g/100g in market snapshot) in the sauces subcategory
- A lower sugar content (5 g/100g in Mintel GNPD vs 5.50 g/100g in market snapshot) in the sauces subcategory
- A lower salt content (0.71 g/100g in Mintel GNPD vs 1 g/100g in market snapshot) in the miscellaneous foods subcategory.

11.3 The Irish National Food Ingredient Database

The Irish National Food Ingredient Database (INFID) datasets have been used to determine trends in nutrient content across the priority food categories for food reformulation. Trends in energy (calories), saturated fat (g), sugar (g) and salt (g) per 100 g or 100 ml, are shown for the other products priority food categories. Trends are indicative and should be interpreted cautiously given that INFIDs 4, 5, 6 and 7 were collected as part of surveys of different population subgroups (see Table 1).

There was a trend towards an increase in the salt content of nuts, seeds, herbs, and spices as well as soups, sauces, and miscellaneous foods between 2011 and 2019, however these trends reversed

showing a decline in 2021. Soups, sauces, and miscellaneous foods saw a trend towards a sharp rise in sugar content and decrease in the saturated fat however the saturated fat increased in 2021. This is shown in Figure 13.



Note: Food categories represented with an unbroken line are prioritised for reformulation of the target nutrient, while food categories represented with a broken line are not prioritised for reformulation of the target nutrient.

Figure 13 Energy (calories) and target nutrient content trend graph per 100 g of priority food categories classified as other food categories between 2011 and 2021, based on INFID 4–7.

Matched pair analysis using the INFID datasets provides an in-depth examination of the nutrient content of the same food product within a priority food category, over time. A detailed examination of the INFID 5 and 6 databases was carried out to identify matched pairs (matched pairs are the exact same products on the market in both years, the matching was completed using product name, manufacturer name and net weight) within the other products priority food categories.

The nutrient content and percentage differences in the median energy (calories) and nutrient content of the other products priority food categories, between 2017 and 2019, are presented in Table 57. As the number of matched pairs identified in some of the priority food categories was small, differences in the median energy (calories), saturated fat (g), sugar (g) and salt (g) content per 100 g between the matched pairs were analysed.

Table 57 Nutrient content and percentage change in the median energy (calories) and target nutrient content (per 100 ml or g) of the other products matched product pairs between 2017 and 2019

Priority food category	Statistic	Energy (kcal)	Saturated fat (g)	Sugar (g)	Salt (g)
Nuts and seeds, herbs and spices (n=9)	**2017**				
	mean (SD)	617.22 (56.79)	7.60 (2.08)	**6.58 (3.28)**	**0.60 (0.63)**
	median (IQR)	626 (54)	8.20 (2.40)	**6.10 (5.10)**	**0.50 (0.98)**
	min-max	508–712	4.40–10	**1.80–11**	**0–1.80**
	2019				
	mean (SD)	612.78 (55.47)	7.39 (2.03)	**5.87 (2.75)**	**0.52 (0.64)**
	median (IQR)	605 (40)	8 (2.80)	**5.90 (3.20)**	**0.10 (0.88)**
	min-max	508–712	4.40–10	**1.80–11**	**0–1.78**
	% change (kcal or g)	-3.35 (-21)	-2.44 (-0.20)	**-3.28 (-0.20)**	**-80 (-0.40)**
Soups, sauces and miscellaneous foods (n=51)	**2017**				
	mean (SD)	**198.92 (204.12)**	**2.09 (2.77)**	**8.82 (9.59)**	**3.05 (4.69)**
	median (IQR)	**107 (235.50)**	**0.70 (3.30)**	**4.80 (9.25)**	**1.39 (1)**
	min-max	**7–730**	**0–11.20**	**0.10–38**	**0.12–23.66**
	2019				
	mean (SD)	**192.76 (204.67)**	**1.99 (2.73)**	**8.61 (9.54)**	**2.94 (4.70)**
	median (IQR)	**93 (250.50)**	**0.70 (2.90)**	**5 (9.25)**	**1.30 (0.95)**
	min-max	**7–730**	**0–11.20**	**0.10–38**	**0.04–23.66**
	% change (kcal or g)	**-13.08 (-14)**	**0 (0)**	**+4.17 (+0.20)**	**-6.47 (-0.09)**

The nutrients targeted for reformulation in each food category are in bold text.
SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum.

Between 2017 and 2019, changes in the energy (calories) and target nutrient content per 100 g or g were observed across different other products priority food categories as follows:

- For the nuts and seeds, herbs and spices matched pairs there was a 3.28% (0.20 g) reduction in the sugar and an 80% (0.40 g) reduction in the salt content per 100 g
- For the soups, sauces and miscellaneous foods matched pairs there was a 13.08% (14 kcal) reduction in the energy, no change in saturated fat, a 4.17% (0.20 g) increase in the sugar and a 6.47% (0.09 g) reduction in the salt content per 100 g.

These findings indicate that the nutrient content of products which remained on the market between 2017 and 2019 has improved.

A visual summary of percentage changes in median nutrient content of the matched pairs in all the priority food categories in 2017 and 2019 are provided in Appendix 3.

11.4 Laboratory analysis and nutrition declaration verification

In 2023, a convenience sample of 28 soups (including fresh soup packed in plastic pots, ambient soups packed in pouches, canned/tinned soup, and dried instant soup) and 35 sauces (including cooking sauces (sweet & sour, bolognese, curry, other Asian style cooking sauces) and condiments (tomato ketchup, salad cream, mayonnaise, and brown sauce)) were collected from the Irish market and analysed for sugar (total sugar, monosaccharides, and disaccharides) content. Samples were collected from a range of supermarkets and convenience retail stores in County Dublin, within the locality of the sampling officers and the Dublin 1 area. Samples were sent to GPAL for analysis (Irish National Accreditation Board Registration Number: 009T).

In addition, nutrition declaration verification analysis was undertaken in relation to sugar. The EC guideline nutrition labelling tolerances for sugar are defined as a tolerance of ± 2 g if the product contains <10 g of sugar per 100 g, and a tolerance of ± 20% if the product contains 10–40 g of sugar per 100 g (European Commission, 2012). This analysis involved using a Nutrition Tolerance Calculator built by the FSAI in Microsoft Excel.

11.4.1 Laboratory analysis results

The mean total sugar content of soups was 3.95 g per 100 g. The majority (75%) of soups sampled provided a suggested serving size on the label, with an average suggested serving size of 230 g. The mean total sugar content per suggested serving size was 9.56 g, which is equivalent to 2.4 teaspoons of sugar. The results of the soups sampling are outlined in Table 58 and Table 59.

The mean total sugar content of sauces was 16.83 g per 100 g. The majority (86%) of sauces sampled provided a suggested serving size on the label, where the average suggested serving size of cooking sauces was 88.46 g and of condiments was 14.90 g. The mean total sugar content per suggested serving size of all sauces was 10.33 g, which is equivalent to 2.6 teaspoons of sugar. The results of the sauces sampling are outlined in Table 60 and Table 61.

Additional details on this analysis can be found in *Food Reformulation Task Force: Monitoring Sugar in Processed Foods (July 2022 to June 2023)* (Food Safety Authority of Ireland, 2024d).

Table 58 Sugar content (monosaccharides, disaccharides, and total sugar) of soups per 100 ml (g/100 ml) in 2022

Sugar in soups per 100 g [(a)]	Year: 2022						
	Monosaccharides			Disaccharides			Total sugar
	Glucose	Fructose	Galactose	Lactose	Sucrose	Maltose	
Mean (SD)	1.09 (0.50)	1.12 (0.56)	0.02 (0.01)	0.18 (0.16)	1.50 (0.61)	0.09 (0.21)	3.95 (1.35)
Median (IQR)	1.10 (0.66)	1.16 (0.77)	0.03 (0.01)	0.15 (0.22)	1.46 (0.93)	0.03 (0.00)	3.70 (1.62)
Min–max	0.43–2.28	0.26–2.27	0.01–0.03	0.01–0.50	0.73–2.90	0.01–1.09	1.90–7.60
Total samples (n)	28						

[(a)] Unless otherwise indicated, all samples were analysed as sold. Varieties of soup included: fresh soup packed in plastic pots, ambient soups packed in pouches, canned/tinned soup, and dried instant soup. One of the dried soups was analysed as reconstituted product as per manufacturer's instructions. Two dried soup samples were analysed as dry product and then based on the manufacturer's dilution instruction i.e. ~1/11 sugar content in g/100 ml as prepared was calculated. As density was 1.0 these are reported as g/100 g.

SD, standard deviation; IQR, interquartile range; min–max, minimum and maximum.

Table 59 Sugar content (monosaccharides, disaccharides and total sugar) of soups per suggested serving size (g/suggested serving size) in 2022

Sugar in soups per suggested serving size[a]	Year: 2022						
	Monosaccharides			Disaccharides			Total sugar
	Glucose	Fructose	Galactose	Lactose	Sucrose	Maltose	
Mean (SD)	2.70 (1.40)	2.84 (1.57)	0.06 (0.03)	0.43 (0.37)	3.54 (1.62)	0.10 (0.10)	9.56 (3.74)
Median (IQR)	2.45 (1.14)	2.56 (1.52)	0.06 (0.04)	0.41 (0.53)	3.10 (2.28)	0.06 (0.03)	8.60 (3.62)
Min–max	0.96–6.12	0.59–6.79	0.01–0.12	0.01–1.18	1.56–7.74	0.04–0.44	3.80–20.29
Total samples (n)	21[b]						

[a] Unless otherwise indicated, all samples were analysed as sold. Varieties of soup included: Fresh soup packed in plastic pots, ambient soup packed in pouches, canned/tinned soup, and dried instant soup. Mean suggested serving size for soups was 230 g with a minimum of 190 g and a maximum of 390 g. Values for one of the dried soups was analysed as a reconstituted product as per manufacturer's instructions. Two dried soup samples were analysed as dry product and then based on the manufacturer's dilution instruction i.e. ~1/11 sugar content in g/100 ml as prepared, was calculated. As density was 1.0 these are reported as g/100 g.
[b] Soup (n=21) with a suggested serving size were included. Seven soups were excluded due to no suggested serving size present on the food label.
SD, standard deviation; IQR, interquartile range; min–max, minimum and maximum.

Table 60 Sugar content (monosaccharides, disaccharides, and total sugar) of sauces per 100 ml (g/100 ml) in 2022

Sugars in sauces per 100 g[(a)]	Year: 2022						
	Monosaccharides			Disaccharides			Total sugar
	Glucose	Fructose	Galactose	Lactose	Sucrose	Maltose	
Mean (SD)	4.86 (4.14)	4.77 (3.92)	0.04 (0.01)	0.10 (0.22)	7.06 (4.73)	0.09 (0.25)	16.83 (9.07)
Median (IQR)	3.40 (3.62)	3.40 (3.24)	0.05 (0.02)	0.05 (0.02)	6.80 (7.60)	0.05 (0.02)	15 (13.40)
Min–max	0.10–16.70	0.07–16.80	0.01–0.05	0.03–1.20	0.44–15.60	0.01–1.50	1.60–38
Total samples (n)	35						

[(a)] Unless otherwise indicated, all samples were analysed as sold. Sauces included in this sample were cooking sauces and condiments. Varieties of cooking sauces included: sweet & sour, bolognese, curry, and other Asian style sauces. Varieties of condiments included: tomato ketchup, salad cream, mayonnaise, and brown sauce. One dried sauce was included in this sample.
SD, standard deviation; IQR, interquartile range; min–max, minimum and maximum.

Table 61 Sugar content (monosaccharides, disaccharides and total sugar) of sauces per suggested serving size (g/suggested serving size) in 2022

Sugars in sauces per suggested serving size[a]	Year: 2022						
	Monosaccharides			Disaccharides			Total sugar
	Glucose	Fructose	Galactose	Lactose	Sucrose	Maltose	
Mean (SD)	2.96 (2.58)	2.93 (2.45)	0.03 (0.02)	0.10 (0.29)	4.25 (3.96)	0.09 (0.31)	10.33 (6.70)
Median (IQR)	2.13 (1.86)	2.24 (1.73)	0.03 (0.03)	0.03 (0.02)	2.90 (4.65)	0.03 (0.03)	8.49 (10.41)
Min–max	0.01–10.02	0.01–10.08	0.00–0.06	0.00–1.39	0.20–15.96	0.00–1.69	0.22–24
Total samples (n)	30[b]						

[a] Unless otherwise indicated, all samples were analysed as sold. Sauces included in this sample were cooking sauces and condiments. Varieties of cooking sauces included: sweet & sour, bolognese, curry and other Asian style sauces. Varieties of condiments included: tomato ketchup, salad cream, mayonnaise, and brown sauce. Mean suggested serving size for cooking sauces was 88.46 g with a minimum of 35.60 g and a maximum of 125 g. Mean suggested serving size for condiments was 14.90 g with a minimum of 14 g and a maximum of 15.30 g. Values for one of the dried sauces was analysed as per reconstituted product as per manufacturer's instructions.
[b] Sauces (n=30) with serving size recommendations were included. Five sauces were excluded due to no suggested serving size present on the food label.
SD, standard deviation; IQR, interquartile range; min–max, minimum and maximum.

11.4.2 Nutrition declaration verification

Of the 63 soups and sauces sampled, 3.2% (n=2) made a nutrition claim related to sugar (n=1 soup made a “low sugar” claim; n=1 sauce made a “reduced sugar” claim).

The conformance of the laboratory-analysed sugar content of soups and sauces with the EC guideline nutrition labelling tolerances was assessed. Of the soups analysed, 96.4% (n=27) were within the EC guideline nutrition labelling tolerances for sugar. One soup was non-conformant, whereby the analysed sugar content was above the maximum amount set for a “low sugar” claim outlined in the Annex of Regulation (EC) No 1-924/2006 of the European Parliament and of the Council of 20 December 2006 on nutrition and health claims made on foods. This was raised at the soups and sauces category meeting in 2023. Of all sauces analysed, 100% (n=35) were within the EC guideline nutrition labelling tolerances for sugar.

The trend in nutrition labelling tolerances for sugar, subcategorised by the type of nutrition claim made on the soups and sauces, is outlined in Figure 14.

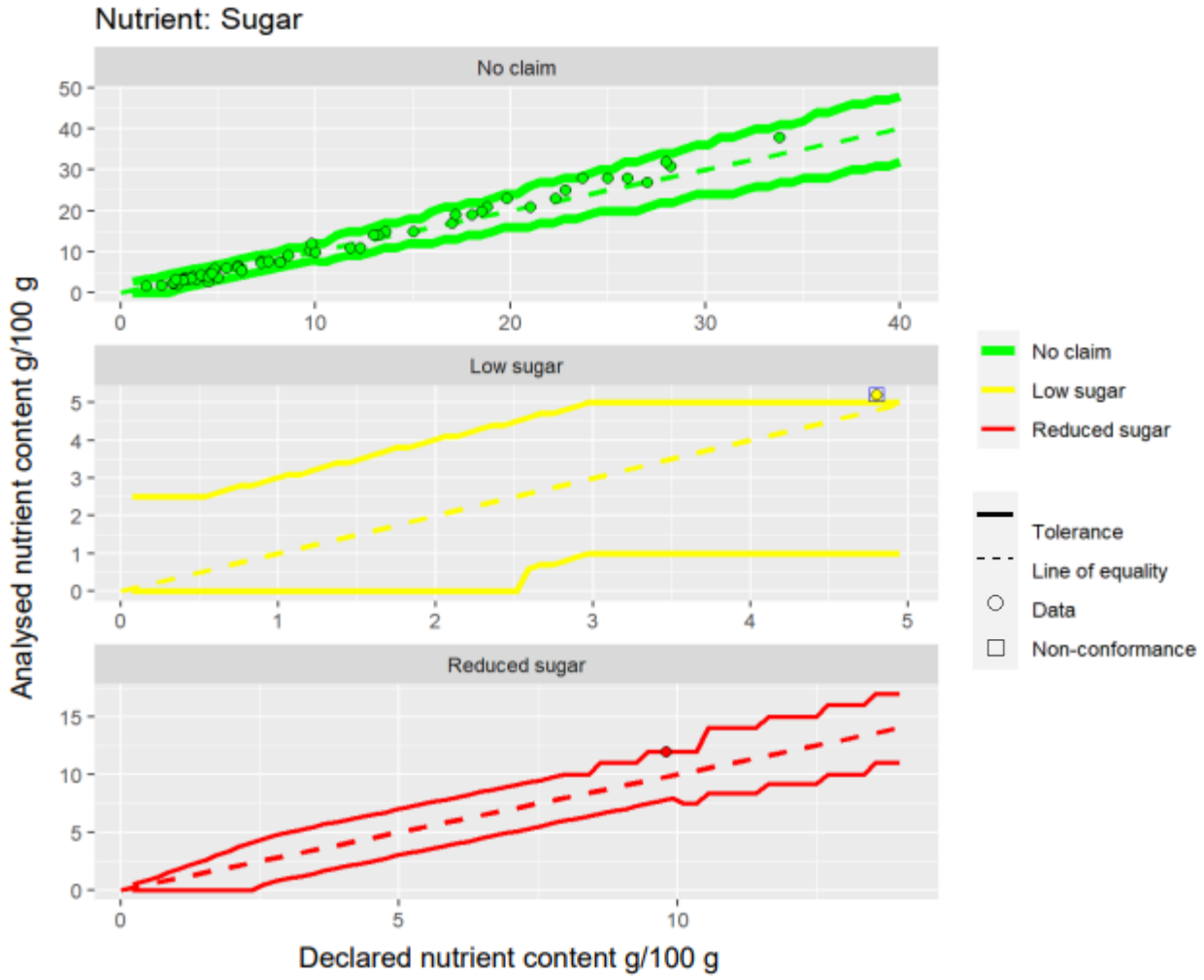


Figure 14 Trend in sugar nutrition labelling tolerances for soups and sauces

As only 3.6% (n=1) soup was outside EC guideline nutrition labelling tolerances for sugar, this survey indicates that declared nutrition labels provide a reliable source of information for sugar monitoring in soups and sauces and may accurately reflect changes in the nutrient content of food products over time and reflect the true food reformulation efforts.

Additional information of this analysis can be found in *The Accuracy of Nutrition Declarations on the Labels of Pre-Packed Soups, Sauces and Breads Sampled in 2022* (Food Safety Authority of Ireland, 2023b).

12. Commercially available complementary foods

Commercially available complementary foods (CACFs) are manufactured food or beverages marketed as suitable for feeding infants (under 12 months) and young children (12–36 months). Infants and young children are a nutritionally vulnerable group with unique and complex dietary and nutritional needs (Lyons *et al*., 2022). Given that dietary habits (including taste preferences) formed in early life persist into adulthood and can influence the development of diet-related noncommunicable diseases (NCDs) in later life (Barker, 1990, Hochberg, 2011, Branca *et al*., 2019). Foods targeting this age group should be low in fat, sugar and salt and contain no added sugar or salt (Food Safety Authority of Ireland, 2012, Department of Health, 2020).

A Roadmap for Food Product Reformulation in Ireland outlines that 2025 targets for CACFs will be developed building upon work completed by the FSAI in assessing the nutrient content and appropriateness of CACFs sold on the Irish market in 2012 and 2018. In addition, the Roadmap states that, where appropriate, the reformulation approach will align with that of Public Health England (PHE)[21] (Public Health England, 2019, Public Health England, 2020).

In 2024, the reformulation targets for CACFs were published in *Food Reformulation Task Force: Reformulation Targets for Commercially Available Complementary Foods* (Food Safety Authority of Ireland, 2024e). As outlined in this report, reformulation targets for sugar and salt in appropriate[22] CACFs were prioritised. For the purpose of setting these targets, the CACFs were categorised into the following eight categories:

1. Savoury meals
2. 100% fruit and/or vegetable purées
3. Snacks/finger foods
4. Cereal-based foods
5. Dairy-based foods
6. Confectionery
7. Ingredients
8. Drinks.

[21] Now referred to as the Office for Health Improvement and Disparities (OHID).
[22] Inappropriate CACFs are those which contain high fat, sugar and salt content and that mimic foods on the top shelf of the children's food pyramid e.g. cakes, crisps and confectionery. Inappropriate CACFs, which are nutrient-poor and high in fat, sugar and salt, are unnecessary in the diets of infants and young children, as they provide limited nutrient value and displace more nutritious foods.

A description of these eight categories, including examples of appropriate and inappropriate CACFs, is outlined in Table 74 in Appendix 4.

The reformulation targets for sugar and salt are outlined in Table 62 and Table 63, respectively.

Table 62 Reformulation targets for sugar content of commercially available complementary foods

Sugar	Food category and threshold
Added sugar	In line with infant feeding guidance, **no sugars should be added** to commercially available complementary foods (CACFs) as ingredients. This target applies to all CACFs on the market. Added sugars are defined by the European Food Safety Authority (EFSA) as *"mono- and disaccharides added to foods as ingredients during processing"* and include free sugars, which are defined as "*added sugars plus sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates".* For the purposes of this guidance preparations of honey, syrups, fruit juices and fruit juice concentrates are considered free sugars (EFSA Panel on Nutrition *et al*., 2022). An allowance is made for the use of macerated/mashed/puréed fruit and vegetables (other than juices and juice concentrates), including the use of lemon or lime juice in small quantities. To keep the sugar content of CACFs as low as feasibly possible, manufacturers should: 1. limit and reduce the amount of macerated/mashed/puréed fruit added as ingredients wherever possible, and 2. refrain from masking the flavour of less sweet or bitter vegetables with sweet vegetables and fruit, i.e., sweet and bitter fruit and vegetables should not be mixed in order to mask the flavour of vegetables[23].
Total sugar	≤15% of energy (calorie) from total sugar in commercially available savoury meals[24] and commercially available snacks/finger foods[25].

CACFs, commercially available complementary foods; %, percentage; EFSA, European Food Safety Authority.

[23] Nitrate is a naturally occurring contaminant in vegetables. Maximum levels (MLs) for nitrate have been set for certain vegetables and baby food and processed cereal-based food for infants and young children. An ML of 200 mg NO3/kg has been set for nitrate in "Baby food and processed cereal-based food for infants and young children" and this ML applies to the products ready to use (placed on the market as such or after reconstitution as instructed by the manufacturer). MLs for nitrates will take precedence over the reformulation targets set out in this report.

[24] Commercially available savoury meals mean all savoury meals, such as vegetable, meat and fish-based meals and meal components **which include combinations** of starches, vegetables, dairy and/or traditional protein and which are sold in pouches, jars and containers and marketed for infants and young children under the age of three years.

[25] Commercially available snack products and finger foods means any grain, starch, pulse/lentil, processed fruit or vegetable snack products such as cracker, bread, rusk, marketed for children under the age of three years. Commercially available snack products should be nutritious savoury and plain foods.

Table 63 Reformulation targets for salt/sodium content of commercially available complementary foods

Salt/sodium	Food category and threshold
Salt	In line with infant feeding guidance, **no salt (or salt-containing ingredients[26]) should be added** to commercially available complementary foods (CACFs).
Sodium[27]	Sodium should be limited to • ≤50 mg/100 kcal. • ≤100 mg/100 kcal if cheese is named within the front-of-pack product name in savoury meal products[24] and dairy-based foods[28].

CACFs, commercially available complementary foods; mg, milligram; kcal, kilocalories.

Additional analysis was undertaken by the FRT in 2024 to assess the nutrient content of CACF products on the Irish market in 2017 and 2021, and the conformance of products in 2021 with the reformulation targets, by category. The results of this analysis are outlined in this section.

12.1 Nutrient content of CACFs in 2017 and 2021

In 2017 and 2021 the FSAI collected food product label and nutrition declaration information for 590 and 353 CACFs from the Irish market, respectively. The sugar and salt content of CACFs collected in 2017 and 2021 are outlined in Table 64 .

[26] This excludes cheese, which is an important source of calcium for children.
[27] Does not apply to products made from 100% fruit and vegetables.
[28] Dairy-based foods and cereals where dairy is the largest ingredient.

Table 64 Sugar and salt content (per 100 g) of commercially available complementary foods sold on the Irish market in 2017 and 2021

		2017		2021	
Food category	**Statistic**	**Sugar (g)**	**Salt (g)**	**Sugar (g)**	**Salt (g)**
Savoury meals	mean (SD)	2.70 (1.82)	0.12 (0.14)	2.74 (1.35)	0.14 (0.26)
	median (IQR)	2.30 (1.43)	0.08 (0.08)	2.50 (1.20)	0.09 (0.06)
	min-max	0–11.70	0–1	0.90–10.60	0–2
	n	200	197	77	77
100% fruit and/or vegetable purées	mean (SD)	9.54 (3.34)	0.03 (0.03)	9.91 (4.02)	0.03 (0.03)
	median (IQR)	9.80 (3.55)	0.03 (0.04)	9.85 (3.80)	0.01 (0.02)
	min-max	1.30–19.50	0–0.12	0.50–19.50	0–0.10
	n	111	110	82	82
Snacks/finger foods	mean (SD)	15.47 (11.85)	0.24 (0.33)	15.59 (12.24)	0.15 (0.23)
	median (IQR)	14.70 (17.82)	0.10 (0.35)	13 (19.50)	0.03 (0.20)
	min-max	0.30–63.40	0–1.60	0.25–63	0–1.40
	n	120	119	115	115
Cereal-based foods	mean (SD)	22.56 (15.85)	0.18 (0.15)	20.47 (15.88)	0.20 (0.20)
	median (IQR)	20.90 (31.35)	0.20 (0.27)	25 (23.05)	0.27 (0.28)
	min-max	0.20–45.50	0–0.65	0.10–87	0–1.10
	n	71	65	43	43
Dairy-based foods[29]	mean (SD)	6.56 (3.48)	0.05 (0.03)	7.63 (3.66)	0.06 (0.03)
	median (IQR)	6.50 (3.50)	0.05 (0.05)	7.30 (3.33)	0.06 (0.03)
	min-max	0–17.10	0–0.13	0.70–15	0–0.13
	n	56	55	26	26
Confectionery	mean (SD)	61.99 (4.85)	0.11 (0.13)	67.88 (1.46)	0.30 (0.61)
	median (IQR)	62.80 (6.60)	0.08 (0.02)	68.50 (2)	0.10 (0.11)
	min-max	54.80–67.70	0.01–0.40	65–69	0.01–1.80
	n	7	7	8	8
Ingredients	mean (SD)	0.10 (0)	0.01 (0)	0.25 (0.07)	0.10 (0)
	median (IQR)	0.10 (0)	0.01 (0)	0.25 (0.05)	0.10 (0)
	min-max	0.10–0.10	0.01–0.01	0.20–0.30	0.10–0.10

[29] A lactose allowance of 3.8 g was applied to yoghurts within the dairy-based foods category to allow for naturally occurring sugars in these products.

	n	2	2	2	2
Drinks	mean (SD)	6.47 (4.32)	0.02 (0.03)	-	-
	median (IQR)	4.75 (4.15)	0.02 (0.03)	-	-
	min-max	1.40–15.20	0–0.10	-	-
	n	18	17	-	-

SD, standard deviation; IQR, interquartile range; min–max, minimum and maximum; n, sample size.

While a decrease in the mean sugar content of the cereal-based foods was found between 2017 and 2021, the median and maximum were higher in 2021 (median 20.9 versus 25 g in 2017 versus 2021, respectively; maximum 45.5 versus 87 in 2017 versus 2021, respectively). The sugar content was also higher in 2021 in the dairy-based foods, confectionery and ingredients categories.

12.2 Conformance of CACFs on the Irish market in 2021 with sugar and salt targets

The CACF products collected in 2021 (n=353) were analysed, by category level, to assess their conformance with the reformulation targets published by the FRT in 2024. Of note, there were no CACF products collected in 2021 from the Drinks category.

12.2.1 Sugar

As outlined in Table 62, the reformulation targets for sugar are no added sugars, with an allowance for the use of macerated/mashed/puréed fruit and vegetables (other than juices and juice concentrates) including the use of lemon or lime juice in small quantities, and ≤15% of energy (calorie) from total sugar in the savoury meals and snacks/finger foods categories.

Between 25% and 100% of CACFs met the reformulation target of no added sugar, with the exception of the ingredients category (0%). In relation to the target of ≤15% of energy (calorie) from total sugar for the savoury meals and snacks/finger foods categories, 51.30% of the snacks/finger foods conform, while 45.45% of the savoury meals conform. The results of this analysis are outlined in Table 65.

Table 65 Proportion of commercially available complementary foods in 2021 conforming with the added sugar and total sugar targets

CACF category	Percentage (n) conforming with no added sugar target[a]	Percentage (n) conforming with total sugar target[b]
Savoury meals (n=77)	100 (77)	45.45 (35)
100% fruit and/or vegetable purées (n=82)	91.46 (75)	NA
Snacks/finger foods (n=115)	43.48 (50)	51.30 (59)
Cereal-based foods (n=43)	95.35 (41)	NA
Dairy-based foods (n=26)	73.08 (19)	NA
Confectionery (n=8)	25 (2)	NA
Ingredients (n=2)	0 (0)	NA

[a] No sugars should be added to commercially available complementary foods as ingredients. An allowance is made for the use of macerated/mashed/puréed fruit and vegetables (other than juices and juice concentrates), including the use of lemon or lime juice in small quantities.
[b] ≤15% of energy (calorie) from total sugar in commercially available savoury meals and commercially available snacks/finger foods.
n, sample size; NA, not applicable.

12.2.2 Salt

As outlined in Table 63, the reformulation targets for salt are no salt (or salt-containing ingredients, excluding cheese) should be added to CACFs and that sodium should be limited to ≤50 mg/100 kcal or ≤100 mg/100 kcal if cheese is named within the front-of-pack product name in savoury meal products and dairy-based foods.

Between 93.04% and 100% of CACFs met the reformulation target of no added salt, with the exception of the ingredients category (0%). CACFs were also assessed against the sodium target whereby sodium should be limited to ≤50 mg/100 kcal, or ≤100 mg/100 kcal if cheese is named within the front-of-pack product name in savoury meal products and dairy-based foods. Between 50.75% and 97.67% of CACFs (excluding savoury meals with cheese in the title) met the sodium target of ≤50 mg/100 kcal, with the exception of the ingredients category (0%). Only 10 products within in the savoury meal category had cheese in the name and 90% met the target. No dairy-based products had cheese in the product name. The results of this analysis are outlined in Table 66.

Table 66 Proportion of commercially available complementary foods in 2021 conforming with the salt and sodium targets

CACF category	Percentage (n) conforming with no added salt target[a]	Percentage (n) conforming with the ≤50 mg sodium/100 kcal target[b]	Percentage (n) conforming with the ≤100 mg sodium/100 kcal target[b]
Savoury meals (n=77)	94.81 (73)	50.75 (34)	90 (9)[c]
100% fruit and/or vegetable purées[d] (n=82)	100 (82)	NA	NA
Snacks/finger foods (n=115)	93.04 (107)	93.04 (107)	NA
Cereal-based foods (n=43)	100 (43)	97.67 (42)	NA
Dairy-based foods (n=26)	100 (26)	88.46 (23)	NA
Confectionery (n=8)	100 (8)	87.50 (7)	NA
Ingredients (n=2)	0 (0)	0 (0)	NA

[a] No salt (or salt-containing ingredients, excluding cheese) should be added to commercially available complementary foods.
[b] Sodium should be limited to ≤50 mg/100 kcal, or ≤100 mg/100 kcal if cheese is named within the front-of-pack product name in savoury meal products and dairy-based foods.
[c] Savory meals with cheese in the product name.
[d] Products made from 100% fruit and vegetables are excluded from the sodium target to reflect naturally occurring sodium in fruit and vegetables.
n, sample size; NA, not applicable.

Whilst there was a trend towards an improvement in the sugar content of CACFs between 2017 and 2021, additional reformulation is required in order to meet the sugar and salt reformulation targets. Over half (54.55%) of the savoury meals do not conform with the total sugar target and just under half (49.25%) do not conform with the sodium target. Over half of the snacks/finger foods (56.52%) and confectionery (75%) do not conform with the added sugar target. None of the products in the ingredients category conform with the sugar, salt or sodium targets. Thus, these categories (savoury meals, snack/finger foods, confectionery and ingredients) require additional reformulation to meet the reformulation targets. In the remaining categories, a minority of products need improvement to bring the products in line with the targets.

13. Research findings

Each year the FRT conducts, commissions or collaborates on research related to reformulation in order to progress the work of the task force.

This section outlines the findings from such research.

13.1 Reformulating breakfast cereals and yoghurts: An exploration of the relationship between percentage reductions and nutrient profile score

This was presented as a poster at the annual Association for the Study of Obesity on the Island of Ireland (ASOI) conference in Dublin in October 2024. The abstract is provided in this section.

Background

A Roadmap for Food Product Reformulation in Ireland set reduction targets for energy and sugar of -20%, and saturated fat and salt of -10%, between 2015–2025 in 40 priority food categories (Department of Health, 2021). Concurrently, England introduced regulations to reduce the visibility, of high fat, sugar and salt (HFSS) foods in retail outlets, potentially driving reformulation efforts in both countries due to shared markets (UK Government, 2021, Department of Health, 2011).

Aim

The aim of this study was to explore the relationship between percentage nutrient reductions and changes in nutrient profile score using the UK Nutrient Profile Model.

Methods

The study included ready-to-eat breakfast cereal (RTEBC) (n=12) and yoghurt (n=8) products, sold on the Irish market in 2016 and 2021, with a HFSS score ≥4 in 2016. HFSS scores and median energy, sugar, saturated fat and salt were calculated for both years (Department of Health, 2011). Changes in HFSS score and nutrient content between years were determined and compared in RStudio v4.4.0.

Results

In 2021, 83.33% (n=10) of RTEBC had a HFSS score ≥4, with a median HFSS score of 7.5 compared to a median HFSS score of 10 in 2016. Of RTEBC, 16.67% (n=2) which had a HFSS <4 in 2021, nutrient reductions were below the Irish reformulation goals (energy (-1.04%,), sugar (-8.04%) and salt (0%)). In yoghurts, 62.50% (n=5) had a HFSS score ≥4 in 2021 with a median HFSS score of 5 in 2016 and 2021. Of yoghurts, 37.50% (n=3) which had a HFSS score <4 in 2021, nutrient reductions exceeded the Irish reformulation goals (energy (-21.58%,), saturated fat (-22.2%) and sugar (-31.67%)).

Conclusion

The study findings suggests that the relationship between achieving a UK non-HFSS categorisation and meeting Irish reformulation goals varies by food product and category. Whilst food products reformulated to achieve UK non-HFSS categorisation could contribute to achieving Irish reformulation targets, additional reformulation may still be required depending on the food category.

13.2 Review of priority food categories from National Adult Nutrition Survey II

In 2024, the FRT commissioned a review of the NANS II to identify food categories that were significant contributors to the dietary intake of target nutrients for food reformulation and compare these to the priority food categories for food reformulation, identified in 2022. This research was undertaken by the Dietary Surveys Team at University College Dublin. The summary of the findings presented here was prepared by the FRT.

Background

In 2022, the FRT commissioned a review of the national consumption survey to identify food categories that were significant contributors to the dietary intake of target nutrients for food reformulation (sugar salt and saturated fat) in the Irish population (aged 5–90 years). Based on this analysis, 40 food categories in high priority need of reformulation of energy, sugar, saturated fat,

and salt were identified (Food Safety Authority of Ireland, 2023a). Food consumption data on adults was previously collected in the National Adult Nutrition Survey (NANS; 2008–09; n=1500; ages 18–90 years). This has now been updated with the National Adult Nutrition Survey II (NANS II; 2020–2022; ages 19–92 years) launched in January 2024.

Aim

The aim of this study was to identify the food categories which are the main contributors to the intakes of energy (calories), total fat, saturated fat, total sugar and sodium in foods and drinks consumed by the Irish adult population (adults and older adults in 2021–2022), compare these to previously identified priority food categories for reformulation and make recommendations to where updates may be required to priority food categories.

Methods

Mean daily intakes were determined and the percentage contributions of the 86 IUNA food categories for younger adults (18–64 years) and older adults (≥65 years) to the target nutrients determined.

The mean daily contributions to the target nutrients for adults were combined with data taken from the previous analysis based on the ranked categories for the target nutrients for children and adolescents (Food Safety Authority of Ireland, 2023a). These ranked contributions for each nutrient were then used to determine the food categories which were the predominant contributors to the intakes of energy (calories), total fat, saturated fat, total sugar and sodium across all population groups (children 5–12 years old; adolescents 13–18 years old; adults 19–64 years old and older adults 65–92 years old). The most common food categories across all population groups for total fat, saturated fat, total sugar, free sugar and sodium were identified.

A comparative analysis of the common food categories identified was undertaken with the FRT's priority food categories. Recommendations for any updates required to the 40 priority food categories, and/or the nutrients prioritised for them, were made.

Results

In terms of energy intakes, for adults the main contributors were 'white sliced bread and bread products' (5.7%), 'wholemeal and brown bread and bread products' (4.8%), 'alcohol' (4.7%) and 'savouries' (4.3%). For older adults the main contributors were 'wholemeal and brown bread and bread products' (6.8%), 'biscuits including crackers' (4.6%), 'alcohol' (4.5%) and 'white sliced bread and bread products' (4.4%).

In terms of saturated fat intakes, for adults the main contributors were 'cheeses' (9.4%), 'chocolate confectionary' (6.1%), 'whole milk' (5.6%) and 'biscuits including crackers' (5.3%). While for older

adults, ‘other fat cheese’ (7.7%), ‘whole milk’ (7.5%), ‘butter’ (6.5%) and ‘biscuits including crackers’ (6.1%) were the main contributors.

In terms of total sugars intakes, for adults, ‘other fruits’ (9.0%), ‘bananas’ (7.8%), ‘sugars, syrups, preserves and sweeteners’ (6.7%), and ‘chocolate confectionary’ (6.4%) were the main contributors. For older adults, the main contributors were ‘other fruits’ (10.7%), ‘bananas’ (8.9%), ‘sugars, syrups, preserves and sweeteners’ (8.3%) and ‘cakes, pastries and buns’ (5.9%).

In terms of sodium intakes, for adults the main contributors were ‘soups, sauces and miscellaneous foods’ (9.2%), ‘white sliced bread and bread products’ (8.7%), ‘wholemeal and brown bread and bread products’ (8.2%) and ‘bacon and ham’ (6.1%). While for older adults, the main contributors were ‘wholemeal and brown bread and bread products’ (13.5%), ‘bacon and ham’ (8.1%), ‘white breads and bread products’ (7.4%) and ‘soups, sauces and miscellaneous foods’ (6.8%).

In total 37 food categories were identified as common food categories. Four food categories were common across all nutrient intakes. A further 11 food categories were common across three nutrients, 9 across two nutrients and 13 across one nutrient.

Overall, 28 food categories directly matched with the FSAI priority list, and a further one food category also matched with two of the FSAI priority food categories. For eight of the food categories there was no match. However, these food categories include fresh produce, alcoholic beverages or are composed mainly of homemade dishes so reformulation would be unsuitable.

A total of eight food categories had changes noted to the target nutrients. For five categories an increase in the number of target nutrients were observed. For three categories a decrease in the number of target nutrients was observed.

Conclusion

For 39 categories a recommendation was made to remain as a priority food category. For one food category (‘other beverages’) a suggestion was made to consider removing or redefining the category which will be considered by the task force for future updates to the priority food categories.

Based on this analysis the 40 priority food categories have not changed. This research could be used to inform future updates to the priority food categories and the nutrients they are targeted for.

13.3 An investigation into the meals offered on children's menus in foodservice outlets in Ireland

In 2024, the FRT commissioned research on meals offered to children in foodservice outlets in Ireland. This research was undertaken by Ipsos B&A. The summary of the findings presented here was prepared by the FRT.

Background

To date in Ireland, we lack sufficient baseline data on children's meal options available in the foodservice/OOH sector and there is no validated monitoring tool to assess menu quality in this sector. In January 2024, the FRT commissioned market research by Ipsos B&A on children's menus in order to provide the FRT with a clear understanding of the meals that should be selected for laboratory testing, specifically for their sodium and saturated fat content, and aid in identifying ways to support opportunities for reformulating children's meals in Ireland.

Aim

The aim of this research was to investigate the meals offered on children's menus across various foodservice outlets in the Republic of Ireland.

Methods

In February 2024, a comprehensive survey of foodservice providers (n=197) using computer aided telephone interviewing was completed to identify the most commonly consumed children's menu options. The breakdown of the sample by outlet type is outlined in Table 67.

Table 67 Breakdown of the outlet type surveyed

Outlet type	Sample size
Standalone restaurant	82
Hotel restaurant	29
Takeaway	13
Standalone restaurant/takeaway	31
Pub that serves food	42
Total	197

The sample for the study was drawn from business listings based on NACE code categorisation (CODE Accommodation and Food Services: 55.1 and 56.1–56.29) and interviews were conducted with owners/managers of the relevant food service establishments.

Results

Role in improving children's diets:

The vast majority (75%) of the managers/owners of food outlets surveyed, felt that the foodservice/OOH sector has a role to play in improving children's diets.

Children's menus:

Almost half (49%) of outlets offering children's menus did not offer a starter. Where a starter is offered, soup (36%) and garlic bread (27%) were the most popular choices. The most popular main course item was chicken nuggets/goujons and chips at 49%. Dessert was not offered on children's menus in 11% of outlets. Where dessert was offered, ice-cream-based desserts were the most popular at 66%. Just over nine out of 10 outlets offering children's menus offered chips as an accompaniment to a main course, compared to 70% for vegetables and 55% for salad.

Making children's meals:

The majority of outlets made their children's meals solely onsite (88%). Deep frying was the most commonly used method to cook children's meals, with 84% of outlets citing this method. Salt was added by 37% of outlets when cooking children's meals.

Healthy options:

When it came to healthy options, just over half of the outlets surveyed (55%) had healthier options (such as meals made without frying, incorporating a wholegrain component into meals, or avoiding the addition of salt during cooking) on their children's menus. Of those who offered healthier options, 96% offered them as a main course, 35% as starters and 25% as desserts, with a further 4% offering another healthy option. While healthy options were on offer, 89% of those who offered them claim that the fact that they are healthier is not noted on their children's menu. Six in 10 state that their healthy options were popular, while 24% state that they were unpopular. The majority of outlets (78%) reported that they do not show any information related to the calorie/fat/salt/sugar content of the meals on their children's menus.

Devising children's menus:

Just over 1 in 10 outlets (14%) used a registered dietitian/nutritionist when devising their children's menu. Of those who referred to guidelines when devising menus (34%), 36% stated that the Healthy Eating Guidelines from the FSAI were the most commonly referred to.

Conclusion

This study highlighted the most popular children's meals served in the foodservice/OOH sector in Ireland. The findings from this study will be used to inform the work of the FRT in the foodservice/OOH sector.

13.4 Food reformulation: the views of the public on the island of Ireland

Safefood, in partnership with the FRT and the Food Standards Agency in Northern Ireland, commissioned research to gather up-to-date information on public perceptions/acceptability of food reformulation. The summary of findings presented here was prepared by the FRT.

Background

This study investigated public perceptions/acceptability of food reformulation among six identified categories of food from the Food Pyramid/Eatwell Guide (Safefood, 2024). This research replicated research undertaken by the Food Standards Agency in Northern Ireland in 2018 and includes members of the general public from Ireland and Northern Ireland. As such, the findings are reported by the island of Ireland (IOI), Republic of Ireland (ROI) and Northern Ireland (NI). The food categories included in this research were ice-cream; baked pastries or buns; biscuits; cakes and desserts; yoghurts; and breakfast cereal.

Aim

The main aim of this research was to investigate peoples' perceptions/acceptability of food reformulation (reduction in sugar, salt, fat and/or calories in pre-packaged and processed food and a decrease in portion size of pre-packaged food). Other objectives of the research included:

- To determine what members of the public feel are the advantages of making food and drinks healthier and any concerns that they may have about this.
- To understand whether members of the public would like to be informed about any changes made to food and drinks to make them healthier.
- To identify who members of the public feel is responsible for driving efforts to make food and drinks healthier.
- To determine who members of the public feel should communicate information about any changes made to food and drinks and the way this information should be communicated.

Methods

A mixed methodology research approach was employed using qualitative discussion groups and application-based diaries along with online quantitative research. Phase 1 involved qualitative research in the form of discussion groups and diaries. Five discussion groups were conducted with members of the public across four life stages: pre-family, families with younger children, families with older children and empty nesters, between the 2nd and 8th of November 2023. The two groups recruited for this study were defined based on their understanding of, and attitude towards, nutrition and food labelling; 'Unsupported and Confused' vs. 'Engaged and Knowledgeable'. Sixteen participants (9 ROI, 7 NI) took part in a study, 'Project Food', on the Ipsos Applife platform. Respondents were prompted with scheduled tasks to complete throughout the course of fieldwork, with answers taking the form of either short video responses, audio responses or open-ended text answers. The findings from the qualitative research informed the design of the questionnaire for phase 2 of the research.

Phase 2 involved quantitative research in the form of a questionnaire completed by a representative sample of 809 people aged 16+ in both Ireland (n=509) and Northern Ireland (n=300) using online panels in February 2024. To qualify to participate, people had to purchase at least one product from the aforementioned food categories either occasionally or often. The participants were divided into three separate groups. Each group was exposed to a different introduction to the section of questions about food reformulation: one group saw no introduction; the second group was informed that the proposed changes were initiated by the Government; and the third group was informed that food manufacturers were responsible for the proposed changes. This division of the participants aimed to investigate if peoples' responses to the concept of food reformulation and reduction in portion sizes varied based on the 'driver' of the changes.

Results

The majority (59%) viewed food reformulation by reducing sugar, salt, fat, and/or calories in pre-packaged or processed food positively, while 45% viewed reformulation by a reduction in portion sizes positively. Two thirds were concerned that food manufacturers could use efforts to make products healthier as a way to make more money.

The primary benefit of food reformulation was believed to be enhanced health, particularly in relation to breakfast cereals (60%) and yoghurts (56%). One in five people did not perceive any benefit to food reformulation, with the most common concerns being changes to taste and price.

Most people prefer to be informed about product changes to understand what they're eating (46%) and make informed decisions (16%), though communication preferences depend on the scale, type, and timing of the changes.

The public views health professionals (64%), the Food Safety Authority of Ireland/Food Standards Agency in Northern Ireland (59%), and the Government (57%) as leading efforts to reduce unhealthy ingredients, while food manufacturers (36%) are also seen as key in reducing portion sizes.

When groups were surveyed based on the 'driver' of the changes, there were no significant differences in the results of the three groups (one with no elaboration on who was driving the changes, one indicating that this was being driven by Government and one that it was being driven by food manufacturers).

People would prefer food manufacturers (76%) to communicate product changes via labels detailing what has changed (75%) and/or that there is a new recipe (63%), with additional preferences for in-store information (33%) and advertising (30%).

Conclusion

The research highlights key findings with important implications for food reformulation policies, practices, and communications. These findings support the view that encouraging the food industry to reformulate their products by reducing energy (calories), saturated fat, sugar, salt and portion sizes has a role to play in improving diets of both adults and children on the island of Ireland. However, public awareness of these efforts could be further expanded through informational campaigns. Notably, public perception of reformulation is not negatively influenced by whether the initiatives are led by food manufacturers or the Government, indicating that the Government has scope under which to communicate with the public on this topic if desired. While reformulation is generally viewed positively, concerns remain around taste, price, and value for money, making it essential that clear communication addresses these issues. Therefore, it is crucial that any food reformulation policy aims to address the concerns from members of the public around price, taste and value for money.

This report is published on the Safefood website and can be found here.

13.5 A cross-sectional study of the relative availability and prominence of shelf space allocated to healthy and unhealthy foods in supermarkets in urban Ireland, by area-level deprivation

This research was completed by the Institute of Food and Health at University College Dublin in collaboration with the FSAI. This abstract is taken from the full paper which was published in BMC Public Health by O'Mahony *et al*. (2024).

Background

Diet-related noncommunicable diseases (NCDs) are a leading cause of ill-health and death across Europe. In Ireland, dietary intakes of saturated fat, free sugar and salt exceed World Health Organization recommendations, and excess consumption follows a social gradient increasing population risk of diet-related NCDs. The retail food environment can influence consumer food choice and subsequent dietary intakes. In high income countries, supermarkets are an increasingly influential actor in consumer food availability, choice, purchase, and subsequent food intake.

Aim

This study aims to assess the relative availability and prominence of healthy and unhealthy foods in Irish supermarkets, by area-level deprivation.

Methods

This study used a cross-sectional study design, and applied a validated measure, as described in the *INFORMAS Protocol: Food Retail – Food availability in supermarkets*. Between October 2021 and February 2022, shelf space (m^2) (height or depth (cm) × length (cm)) and prominence (visibility), of foods, classified as healthy and unhealthy and represented by a proxy indicator, were collected in supermarkets (n =36) in County Dublin, Ireland. Overall the proportion of mean relative shelf space (m^2), allocated to healthy and unhealthy foods, and its prominence, by area-level deprivation, and retailer, were determined. We used t-tests and one-way ANOVA to analyse possible differences between the proportion of relative shelf space available to healthy and unhealthy foods, and its prominence, by area-level deprivation and retailer.

Results

The study found the proportion of shelf space measured allocated to unhealthy food was 68.0% (SD 10.6). Unhealthy foods were more likely to be in areas of high prominence. Overall, there was no statistically significant difference between the proportion of relative shelf space available to unhealthy foods in areas of high and low deprivation. A statistically significant difference in the proportion of relative shelf space allocated to healthy and unhealthy food by area level deprivation was found in one retailer.

Conclusion

Unhealthy foods had a higher proportion of shelf space and were more prominent than healthy foods in supermarkets in County Dublin, Ireland. The current availability and prominence of foods in supermarkets does not align with Food Based Dietary Guideline recommendations and does not support consumers to make healthier food choices. There is a need for supermarkets in Ireland to

improve the availability and prominence of healthy foods to support consumers to make healthier food choices.

13.6 Best-ReMaP

This work was completed by the FSAI between 2020 and 2023.

Background

The Best-ReMaP Joint Action was a three-year project (October 2020–September 2023), involving EU Member States on diet and nutrition with a special focus on children. The principal aim of this Joint Action was to identify, adapt, replicate and implement practices that have proven to work in the areas of food reformulation, food marketing and public procurement of foods in public settings (kindergartens, schools and hospitals).

One Work Package within this Joint Action focussed on sharing and promoting best practices for implementing a sustainable and coordinated European monitoring system for processed food reformulation. This was called Work Package 5 (WP5).

FRT involvement

The FSAI took part in WP5 between 2020 and 2023. Food label data was collected across five food categories (fresh dairy products and desserts, breakfast cereals, delicatessen meats and similar, soft drinks, bread and bread products) by the Public Health Nutrition Policy team in 2021 and subsequently codified and analysed by the FRT according to the Best-ReMaP guidelines.

Outcomes

The final Best-ReMaP report on reformulation monitoring was published in April 2024. For Ireland, due to the data available, this analysis focussed on changes in the content of breakfast cereals and yoghurts, and the modelled impact of such changes on intakes of fat, saturated fat, sugar and salt in adults (18–64 years), using dietary data from the National Adult Nutrition Survey.

In the next Joint Action, PreventNCD (2024–2027), more in depth analysis of the data collected during Best-ReMaP will be carried out in order to consider all data gathered in a harmonised way at the European level to compare nutrient content across countries, assess the impact on nutrient intakes and link the results with national public policies.

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Appendix 1

Table 68 Priority food categories (n=40) for food reformulation in Ireland, the target nutrients they contribute to in the Irish diet (1–90 years) and whether considered suitable for nutrient or suggested serving size reduction

Food Categories	No. of Categories #	Energy (calories)	Saturated Fat	Sugar	Salt	Reformulation	Suggested Serving Size Reduction
Biscuits including crackers	4	✓	✓	✓	✓	✓	✓
Cakes, pastries & buns	4	✓	✓	✓	✓	✓	✓
Soups, sauces & miscellaneous foods	4	✓	✓	✓	✓	✓	✓
Chocolate confectionery	3	✓	✓	✓	X	✓	✓
Savouries	3	✓	✓	X	✓	✓	✓
White sliced bread & rolls	3	✓	X	✓	✓	✓	✓
Ready to eat breakfast cereals	3	✓	X	✓	✓	✓	✓
Cheeses	3	✓	✓	X	✓	✓	✓
Yoghurts	3	✓	✓	✓	X	✓	✓
Other fat spreads (40-80% fat)	3	✓	✓	X	✓	✓	✓
Beef & veal ready meals	3	✓	✓	X	✓	✓	✓
Meat products	3	✓	✓	X	✓	✓	✓

Other breakfast cereals	3	✓	✓	✓	X	✓	✓
Wholemeal & brown bread & rolls	3	✓	X	✓	✓	✓	✓
Sausages	2	X	✓	X	✓	✓	✓
Ice-creams	2	X	✓	✓	X	✓	✓
Bacon & ham	2	X	✓	X	✓	✓	✓
Nuts & seeds, herbs & spices	2	X	X	✓	✓	✓	✓
Chipped, fried & roasted potatoes	2	✓	✓	X	X	✓	✓
Fish & fish products	2	✓	X	X	✓	✓	✓
Savoury snacks	2	✓	X	X	✓	✓	✓
Chicken, turkey & game	2	✓	X	X	✓ *	✓	✓
Poultry & game ready meals	2	✓	X	X	✓	✓	✓
Sugars, syrups, preserves & sweeteners	1	X	X	✓	X	✓	✓
Non-chocolate confectionery	1	X	X	✓	X	✓	✓
Carbonated beverages	1	X	X	✓	X	✓	✓
Alternatives to milk & milks-based beverages	1	X	X	✓	X	✓	✓
Desserts	1	X	X	✓	X	✓	✓
Butter (over 80% fat)**	1	X	X	X	✓	✓	✓

Peas, beans & lentils	1	X	X	X	✓	✓	✓
Fruit juices & smoothies	1	X	X	✓	X	✓	✓
Other breads	1	X	X	X	✓	✓	✓
Beef & veal	1	X	✓	X	X	✓	✓
Rice puddings & custard	1	X	X	✓	X	✓	✓
Burgers	1	X	X	X	✓ *	✓	✓
Other beverages	1	X	X	✓	X	✓	✓
Squashes, cordials & fruit juice drinks	1	X	X	✓	X	✓	✓
Meat pies & pastries	1	X	X	X	✓	✓	✓
Processed potato products	1	X	X	X	✓	✓	✓
Vegetable & pulse dishes	1	X	X	X	✓	✓	✓

[#] Number of target nutrients the food category is a contributor to.
* Chicken, turkey and game and Burgers are contributors to sodium dietary intake in children and adolescence only.
** Although butter was a source of saturated fat in the Irish diet, the legal composition of butter inhibits the reformulation of this nutrient.

Appendix 2

Market snapshot results for the beverage priority food categories in 2021

Table 69 Mean (SD), median (IQR) and minimum and maximum target nutrient content per 100 ml of beverages

Priority food category	Statistic	Sugar (ml)
Alternative to milk & milk-based beverages (n=164)	mean (SD)	9.31 (13.65)
	median (IQR)	4.75 (6.70)
	min–max	0–62
Carbonated beverages (n=375)	mean (SD)	3.59 (3.72)
	median (IQR)	4.00 (4.72)
	min–max	0–18
Fruit juices & smoothies (n=82)	mean (SD)	9.91 (1.30)
	Median	10 (2)
	min–max	5.50–12.60
Squashes, cordials & fruit juice drinks (n=126)	mean (SD)	3.32 (2.87)
	Median	3.90 (3.78)
	min–max	0.05–16.00
Other beverages (n=56)	mean (SD)	1.47 (2.50)
	median (IQR)	0.15 (2.30)
	min–max	0–9

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum; n, sample size

Market snapshot results for the confectionery, snacks and desserts priority food categories in 2021

Table 70 Mean (SD), median (IQR) and minimum and maximum target nutrient content per 100 g of desserts

Priority food category	Statistic	Sugar (g)
Desserts (n=54)	mean (SD)	17.74 (7.33)
	median (IQR)	18.45 (8.35)
	min–max	1.60–31.00

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum; g, gram; n, sample size

Market snapshot results for the cereals and breads priority food categories in 2021

Table 71 Mean (SD), median (IQR) and minimum and maximum target nutrient content per 100 g of breads

Priority food category	Statistic	Energy (kcal)	Sugar (g)	Salt (g)
Other breads (n=178)	mean (SD)	NT	NT	0.99 (0.37)
	median (IQR)	NT	NT	0.97 (0.30)
	min–max	NT	NT	0.10–2.50
White sliced bread & rolls (n=175)	mean (SD)	260.49 (36.23)	4.77 (3.07)	1.06 (0.22)
	median (IQR)	257 (47)	3.70 (3.85)	1.10 (0.12)
	min–max	184–368	0.19–16	0.10–2.80
Wholemeal & brown bread & rolls (n=146)	mean (SD)	242.29 (28.82)	2.83 (1.46)	1.10 (0.29)
	median (IQR)	234.50 (34.50)	2.60 (1.60)	1.06 (0.20)
	min–max	173–331	0.10–9	0.10–2.29

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum; kcal, kilocalories; g, gram; n, sample size; NT, not targeted

Market snapshot results for the meat and fish priority food categories in 2021

Table 72 Mean (SD), median (IQR) and minimum and maximum target nutrient content per 100 g of meat and meat products

Food category	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Bacon & ham (n=334)	mean (SD)	NT	3.54 (2.71)	2.66 (1.68)
	median (IQR)	NT	3.20 (4.40)	2.50 (0.90)
	min–max	NT	0.40–14.00	0.80–27.00*
Beef & veal (n=22)	mean (SD)	NT	1.21 (0.67)	NT
	median (IQR)	NT	1 (0.28)	NT
	min–max	NT	0.60–3	NT
Chicken, turkey & game (n=73)	mean (SD)	128.74 (32.61)	NT	1.31 (0.54)
	median (IQR)	120 (18)	NT	1.10 (0.90)
	min–max	95–273	NT	0.50–2.60

*NOTE: 27 g/100 g of salt declared on the label for prosciutto ham, this value accurately reflects the label information; however, it is a high value and an outlier, and should be interpreted with caution.
SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum; kcal, kilocalories; g, gram; n, sample size; NT, not targeted

Market snapshot results for the meat-based products and convenience foods priority food categories in 2021

Table 73 Mean (SD), median (IQR) and minimum and maximum target nutrient content per 100 g of meat and meat products

Food category	Statistic	Energy (kcal)	Saturated fat (g)	Salt (g)
Sausages (n=191)	mean (SD)	NT	10.28 (3.38)	2.66 (1.10)
	median (IQR)	NT	9.80 (3.60)	2.10 (2.03)
	min–max	NT	0.70–19	1.10–6.50

SD, standard deviation; IQR, interquartile range; min-max, minimum and maximum; kcal, kilocalories; g, gram; n, sample size; NT, not targeted

Appendix 3

Summary of percentage changes in nutrient content of the matched pairs across 34 priority food categories between 2017 and 2019

In this report, matched pair analysis using INFID 5 and 6 is reported. Given that the timeframe between INFID 5 and 6 is only two years, the progress in reformulation between the two years (i.e. 2017 and 2019) will be limited. In addition, as INFID only contains the foods most commonly eaten by a representative group of the population in Ireland at a particular time, the matched pairs presented in this report are not representative of all foods on the Irish market.

Energy (calories)

The change in median energy (calories) content (per 100 g) of the matched pairs in priority food categories between 2017 and 2019 are shown in Figure 15.

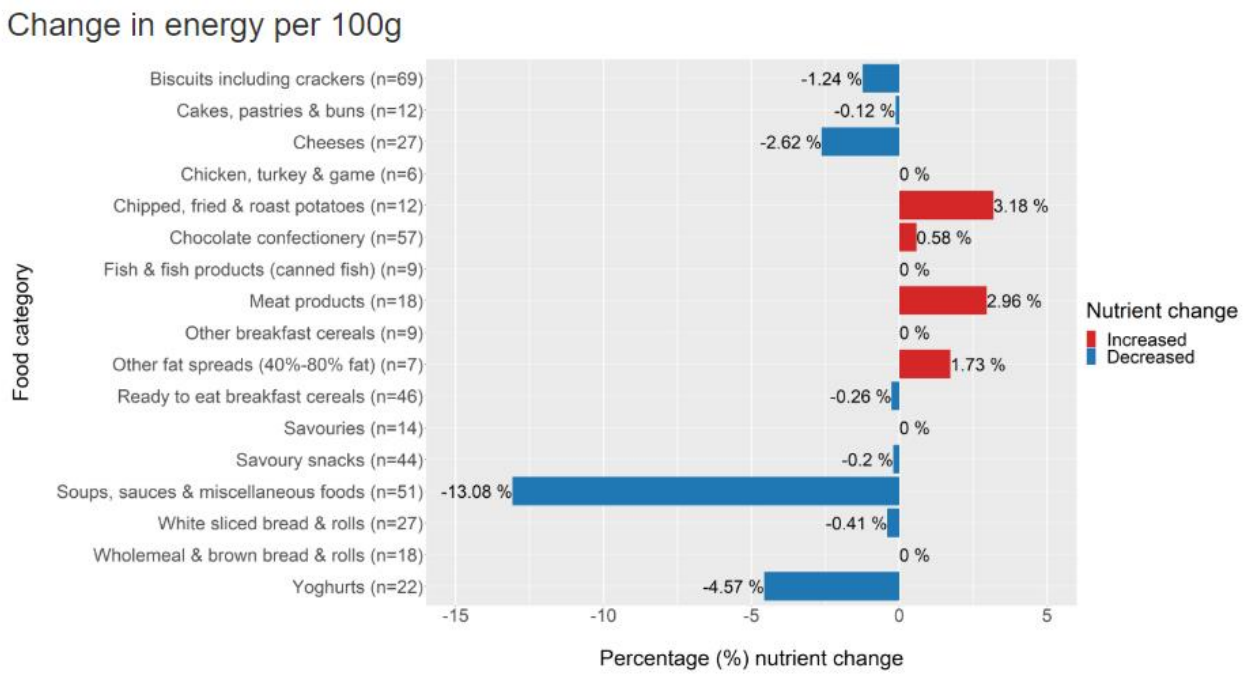

Figure 15 Percentage changes in the median energy (calories) content per 100 g of the priority food categories with matched pairs in 2017 and 2019.

Saturated fat

The change in median saturated fat content (per 100 g) of the matched pairs in priority food categories between 2017 and 2019 are shown in Figure 16.

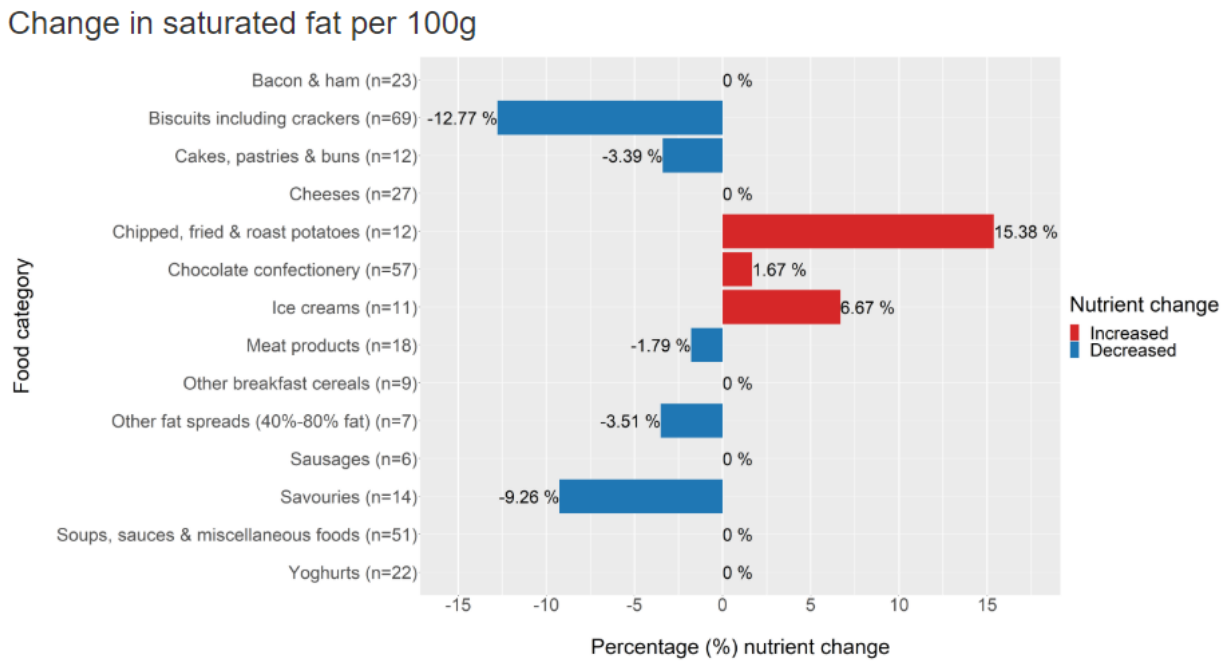

Figure 16 Percentage changes in the median saturated fat content per 100 g of the priority food categories with matched pairs in 2017 and 2019.

Sugar

The change in median sugar content (per 100 ml or g) of the matched pairs in priority food categories between 2017 and 2019 are shown in Figure 17.

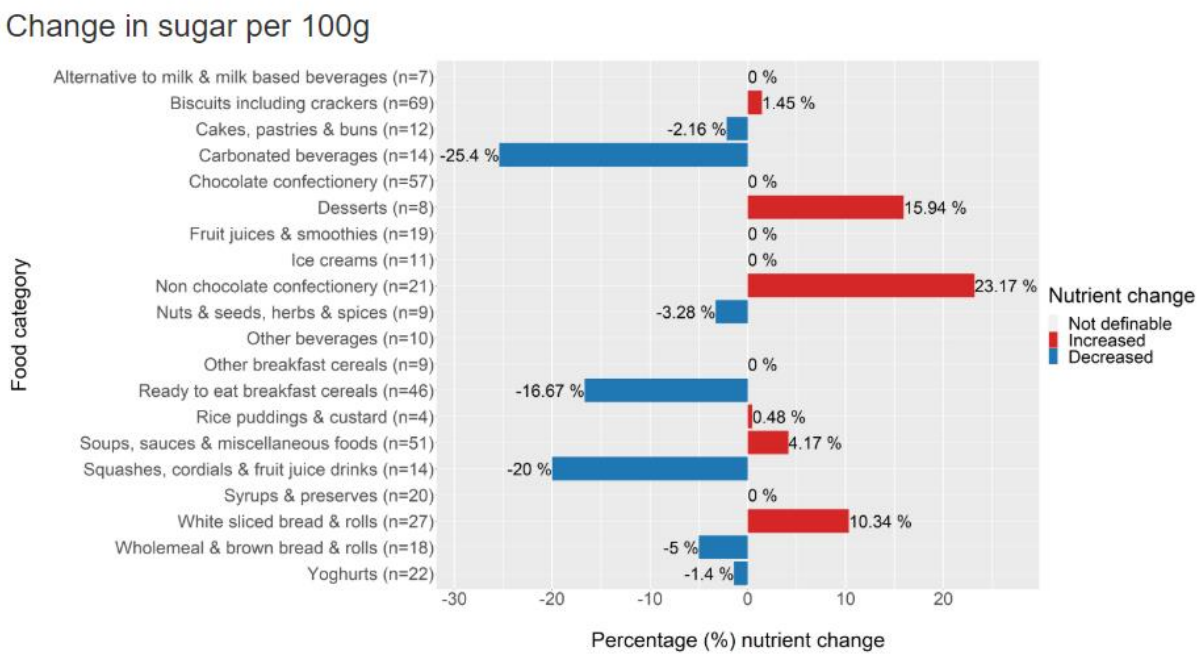

Figure 17 Percentage changes in the median sugar content per 100 ml or g of the priority food categories with matched pairs in 2017 and 2019.

Salt

The change in median salt content (per 100 g) of the matched pairs in priority food categories between 2017 and 2019 are shown in Figure 18.

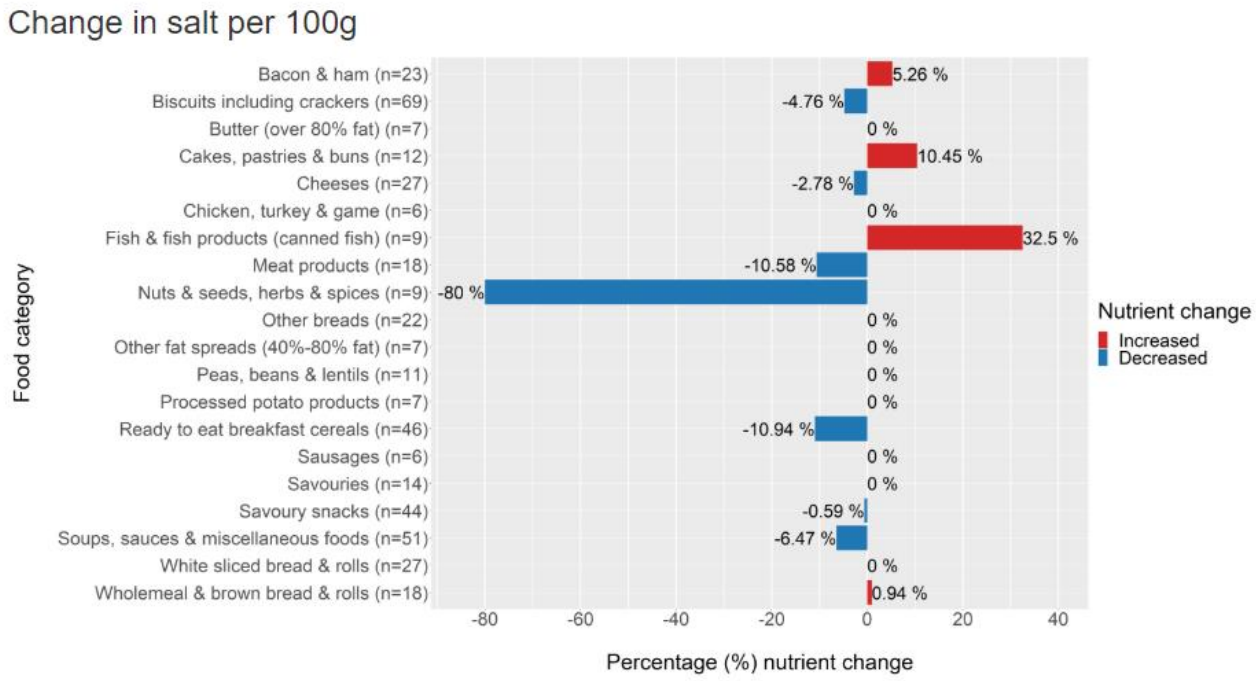

Figure 18 Percentage changes in the median salt content per 100 g of the priority food categories with matched pairs in 2017 and 2019.

Appendix 4

Table 74 Description of the eight categories of commercially available complementary foods (CACFs), including examples of appropriate and inappropriate CACFs

Category	Description	Examples of appropriate CACFs	Examples of inappropriate CACFs
Savoury meals	All savoury meals, such as vegetable, meat and fish-based meals and meal components which include combinations of starches, vegetables, dairy and/or traditional protein and which are sold in pouches, jars and containers and marketed for infants and young children under the age of three years.	Nutrient-dense savoury meals with no added sugar or salt.	Savoury meals with added sugar and/or salt and low nutrient density.
100% fruit and/or vegetable purées	Purées made from 100% fruit and/or vegetables.	Nutrient-dense purées with no added sugar or salt.	Purées with low nutrient density, with added sugar and salt.
Snacks/finger foods	Snacks/finger foods mean any grain, starch, pulse/lentil, processed fruit or vegetable snack products such as cracker, bread, rusk, marketed for children under the age of three years.	Energy-dense and nutritious snacks and finger foods containing ≤15% energy from sugar.	Snacks/finger foods exceeding the sugar and salt targets. Snacks/finger foods with limited nutrient density. Products mimicking foods on the top shelf of the children's food pyramid e.g. biscuits, crisps, cakes and confectionery.
Cereal-based foods	Dry cereals and starches for preparation with milk or water.	Unsweetened porridge, rice powder or breakfast cereal.	Breakfast cereal or porridge with added sugar, salt or cream.
Dairy-based foods	Dairy-based foods and cereals where dairy is the largest ingredient.	Yoghurt with no added sugar.	Yoghurt with added sugar or dairy-based dessert with added cream.
Confectionery	Chocolate and non-chocolate confectionery.	None.	Chocolate-based or covered snacks/finger foods, such as jellies and

			pulped and dried fruit.
Ingredients	CACFs added in meal preparation such as stocks and sauces.	Sauce with no added sugar or salt. Stock with no added sugar or salt.	Gravies with added salt. Sauce with added salt/sugar.
Drinks	Drinks excluding formula milks.	None. Only milk and water should be offered as drinks to infants and young children.	Juice based drinks, flavoured/sweetened water

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