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Food Reformulation Task Force:

Maximum per serving salt targets for pizza sold in the foodservice sector



Maximum per serving salt targets for pizza sold in the foodservice sector

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Glossary

Term	Text				
EFSA	European Food Safety Authority				
EU	European Union				
FRT	Food Reformulation Task Force				
FSAI	Food Safety Authority of Ireland				
g	gram (s)				
IQR	interquartile range				
mg	milligram (s)				
min-max	minimum and maximum values				
n	number of sample products				
NCDs	noncommunicable diseases				
OHID	Office for Health Improvement and Disparities				
ООН	out-of-home				
РАНО	Pan American Health Organization				
PHE	Public Health England				
UK	United Kingdom				
WHO	World Health Organization				

1. Introduction

1.1 Purpose

This report outlines the maximum per serving salt targets for adult and children's pizzas sold in the Irish foodservice sector¹.

1.2 Background

Dietary salt intakes are decreasing in the Irish population; however, they remain above the international recommended target of less than 5 g/day (World Health Organization, 2023) and the Food Safety Authority of Ireland (FSAI) population target of 6 g/day, as highlighted in the Food Reformulation Task Force Progress Report 2023 (FSAI, 2024a). The consumption of food from foodservice outlets is associated with higher dietary salt intakes (Gesteiro et al., 2022; WHO, 2022). One popular food choice amongst Irish consumers, identified as high in salt when purchased from foodservice outlets, is pizza (Bord Bia, 2020; safefood, 2012). Given that the dietary intake of salt is a modifiable risk factor for reducing diet-related noncommunicable diseases (NCDs), the Benchmarking the salt content of pizza sold in the foodservice sector in 2023 report was published by the Food Reformulation Task Force (FRT) in 2024. This work indicates that pizza served in the foodservice sector contain high levels of salt and is a food category that warrants particular attention for salt reduction (FSAI, 2024b).

1.3 Salt reformulation targets for priority food categories

The Roadmap for Food Product Reformulation in Ireland has set percentage reductions for target nutrients, which are aimed at all parts of the food industry including food manufacturers, food retailers, ingredient suppliers and the foodservice sector (Department of Health, 2021). The Roadmap has specifically set a salt reduction target of 10% for priority food categories between 2015 and 2025 (Department of Health, 2021). Priority food categories are outlined in the Priority Food Categories for Reformulation in Ireland Version 3 report (FSAI, 2023). The Roadmap also states "As in the UK, the eating out of home sector is expected to procure and/or make products that meet the relevant targets and maximum per serving salt targets will be developed for this sector, drawing on experience from Northern Ireland and Great Britain" (Department of Health, 2021). However, to date, there has been a lack of nutrition composition information for food products sold in the Irish

¹ Foodservice or out-of-home (OOH) sector are terms commonly used to describe any establishment where food and drink are prepared outside of the home for immediate consumption, e.g. restaurant, café, takeaway, public house.

foodservice sector. This absence of information has presented a challenge in setting maximum per serving salt targets.

1.4 Benchmark of the salt content of pizza sold in foodservice outlets

To address this information gap, the FRT established a 2023 benchmark of the salt content of pizzas, a subcategory of the "Savouries" priority food category, sold in the foodservice sector (FSAI, 2024b). The rationale for prioritising pizza and the methodology followed to establish the 2023 benchmark is described in the <u>Benchmarking the salt content of pizza sold in the foodservice sector in 2023</u> report (FSAI, 2024b). The findings of this survey revealed notably high salt content in pizza sold in restaurant and takeaway outlets in Ireland in 2023.

In summary, the mean salt content per 100 g of a convenience sample of adult pizzas (n=47) was 1.46 g/100 g and of a convenience sample of children's pizzas (n=13) was 1.37 g/100 g. The mean salt content per whole adult pizza (n=47) was 7.27 g/pizza and per whole children's pizza (n=13) was 2.73 g/pizza (FSAI, 2024b). Furthermore, across the three subcategories of pizza for adults and children, a wide variation was observed in the mean analysed salt content. For example, the salt content per whole pizza for adults ranged from 3.34–11.01 g/pizza, while the salt content per whole pizza for children ranged from 1.31–4.68 g/pizza, across all subcategories (FSAI, 2024b). The Benchmarking the salt content of pizza sold in the foodservice sector in 2023 report was used to inform the development of the maximum per serving salt targets for pizzas sold to both adults and children outlined in this report (FSAI, 2024b).

2. Aim and objectives

2.1 Aim

The aim of this report is to define the maximum per serving salt targets for pizza, sold in the foodservice sector in Ireland in 2023, and to outline the methodology and guidance followed in their derivation.

2.2 Objectives

The objectives of this report are:

- 1. To describe the methodology followed for defining the maximum per serving salt targets for pizzas sold to both adults and children in Irish foodservice outlets.
- 2. To outline the maximum per serving salt targets for adult and children's pizza subcategories sold by foodservice outlets in Ireland.
- 3. To outline salt reduction strategies to support the foodservice sector achieve the maximum per serving salt targets for adult and children's pizzas.

3. Methodology

3.1 Approach to setting maximum per serving salt targets for adult and children's pizzas

To define the maximum per serving salt targets for both adult and children's pizzas sold by Irish foodservice outlets, the following steps were undertaken:

- 1. A review of the scientific and grey literature on approaches used to determine maximum per serving salt targets was completed (Downs *et al.*, 2015; WHO, 2016, Pan American Health Organization (PAHO)/WHO, 2013; 2021).
- 2. Using the 2023 benchmark of the salt content in a convenience sample of adult and children's pizzas, the median salt content for all pizzas and for each subcategory of pizza, per 100 g and per portion (including per whole pizza (g/pizza) and per pizza slice (g/slice)) were determined (FSAI, 2024b). This is outlined in Appendix 1.
- 3. The maximum per serving salt target for each subcategory of adult and children's pizzas was established at the median level of salt (50th percentile) per 100 g, per whole pizza (g/pizza) and per pizza slice (g/slice). This is shown in Appendix 2.
- 4. The feasibility of the maximum per serving salt targets was assessed by determining the percentage of existing pizza samples, for both adults and children, that adhere to these salt targets. A feasibility threshold of 33% of existing pizza samples meeting the maximum per serving salt targets was established (Eyles et al., 2020). This assessment was supported by visualising the distribution of salt and median level of salt for each subcategory of adult and children's pizzas per 100 g using histograms. This is shown in Appendix 2.
- 5. To explore technical feasibility and acceptability, the maximum per serving salt targets for each subcategory of pizza per 100 g and per portion (g/pizza, g/slice) were considered against the European Union (EU) and international daily intake threshold for salt (EFSA, 2019; WHO, 2023), the WHO sodium benchmarks for priority food categories (WHO, 2024) and the PHE salt reduction targets for food categories based in the foodservice sector (PHE, 2020).
- 6. A public consultation was opened, between 1 and 29 July 2024, for interested parties to submit their feedback on the maximum salt targets for adult and children's pizzas sold by Irish foodservice outlets, and the rationale and methodology behind their development.
- 7. The maximum salt targets were developed and defined based on the findings of the above review, feasibility assessment of the maximum salt targets, as well as taking into account the feedback obtained during the public consultation.

3.2 Summary review of the scientific literature and guidance

3.2.1 Scientific and grey literature relevant to setting maximum salt targets

The FRT acknowledges the presence of technical and food safety challenges associated with salt reduction. Therefore, a review of global best practice and evidence-based guidance was completed to inform the development of a methodology for setting maximum salt targets to ensure technical, consumer and industry acceptability. The review included the following guidance:

- Setting maximum salt targets for food categories prioritised for food reformulation based on their contribution to dietary intakes of salt is a recommended approach for stimulating the reduction of salt in food products (WHO, 2016; Downs et al., 2015; PAHO/WHO, 2013; 2021).
- Employing statistical graphical tools to visualise the salt content distribution (mean and median salt levels), along with identifying key percentile levels are recommended approaches for determining maximum salt targets for food categories (PAHO/WHO, 2013; 2021).

3.2.2 Salt targets defined in other regions relevant to setting maximum salt targets

A comparison was made between the maximum per serving salt targets for adult and children's pizzas and sodium benchmarks for pizza set in other regions. The review included the following guidance:

- Public Health England². Salt reduction targets for 2024 (PHE, 2020).
- WHO. Global sodium benchmarks for different food categories (WHO, 2024).

When compared to the WHO global sodium benchmarks, the maximum salt targets for each subcategory of adult pizza per 100 g (g/100 g), exceeded the WHO sodium benchmark for pizza of 450 mg/100 g (equivalent to 1.14 g/100 g of salt) (WHO, 2024).

Additionally, when compared to the PHE salt reduction targets, similar targets were observed with the maximum per serving salt targets per takeaway pizza slice for adults (g/slice) (PHE, 2020; Appendix 1). The PHE salt target for takeaway style pizza (per slice) with cured meat toppings such as pepperoni was set at 1.13 g/slice and for takeaway pizza toppings without cured meat such as margherita, the salt target was set at 0.88 g/slice (PHE, 2020). These targets are similar to the FSAI maximum per serving salt targets per pizza slice outlined in Table 1.

² Public Health England (PHE) now referred to as the Office for Health Improvement and Disparities (OHID).

3.3 Summary of public consultation responses

A public consultation was open for interested parties to submit their feedback on the maximum per serving salt targets from 1 July 2024 to 29 July 2024. The consultation documents can be found on the FSAI website here. In total, six responses were received and a summary of these responses and feedback can found here (FSAI, 2024c). The consideration of these responses is reflected in the maximum per serving salt targets for adult and children's pizzas as outlined in this report.

4. Maximum per serving salt targets

4.1 Maximum per serving salt targets for adult and children's pizza

Based on the evidence summarised in this report, the foodservice sector should prioritise the reformulation of the salt content in adult and children's pizzas sold by Irish foodservice outlets. The maximum per serving salt targets per 100 g and per portion (pizza slice) (g/slice) have been established in response to the notable high salt content levels found in a variety of adult and children's pizzas sold in restaurant and takeaway outlets in Ireland. In line with the scientific literature (Downs *et al.*, 2015; WHO, 2016; PAHO/WHO, 2013; 2021) and international dietary guidance for adults and children (WHO, 2023; EFSA, 2019), the maximum salt targets are intended to reduce the salt content of the most common pizza varieties sold in the foodservice sector. This is shown in Tables 1 and 2.

Table 1 Maximum per serving salt targets for adult pizzas

Adults	Maximum per serving salt targets					
Pizza subcategory	Subcategory description	per 100 g	per pizza slice ³			
Cheese-only	Plain classic margherita, mozzarella, or a single cheese and tomato-based pizza without any additional toppings.	1.42 g/100 g	0.80 g/slice			
Pepperoni, salami, meatballs, beef, or sausage	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.	1.57 g/100 g	1.12 g/slice			
Other toppings	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.	1.28 g/100 g	0.92 g/slice			

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³ On average, the mean weight per pizza slice for adults was 72 g/slice. As a guideline, a medium-sized adult's whole pizza should contain a maximum of eight slices (FSAI, 2024b).

Table 2 Maximum per serving salt targets for children's pizzas

Children	Maximum per serving salt targets					
Pizza subcategory	Subcategory description	per 100 g	per pizza slice ⁴			
Cheese-only	Plain classic margherita, mozzarella, or a single cheese and tomato-based pizza without any additional toppings.	1.19 g/100 g	0.77 g/slice			
Pepperoni, salami, meatballs, beef, or sausage	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.	1.41 g/100 g	0.72 g/slice			
Other toppings	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.	1.24 g/100 g	0.49 g/slice			

 $^{^4}$ On average, the mean weight per children's pizza slice was 58 g/slice (FSAI, 2024b). As a guideline, a child's whole pizza should contain a maximum of four slices (FSAI, 2024b).

4.2 Application and monitoring of adherence to achieve maximum per serving salt targets

The salt content of adult and children's pizzas sold by Irish foodservice outlets should be reduced to below the maximum per serving salt targets outlined in this report, **within a one-year period.** Whilst achieving reformulations, it is important to note that foods placed on the Irish market must be safe, as required by Regulation (EC) No 178/2002, Article 14.

The results of the salt content of pizza sold by Irish restaurant and takeaway outlets in 2023, outlined in Appendix 1 will be used as a baseline.

Progress by the foodservice sector in achieving the maximum per serving salt targets for pizzas sold to both adults and children will be monitored by repeating a survey in line with the methodology for sampling and analysis outlined in the <u>Benchmarking the salt content of pizza sold in the foodservice sector in 2023</u> report (FSAI, 2024b).

5. Salt reduction strategies for foodservice pizza

To achieve the maximum per serving salt targets outlined in this report, consideration is required in reformulating the salt content in various aspects of pizza production, including dough formulation, tomato sauce composition, cheese, and topping selection. The salt reduction strategies outlined below, are suggestions of approaches which could be used and are not exhaustive. They are intended to support all stakeholders in the foodservice sector in reducing the amount of salt used in pizza recipes:

Strategies to reduce the salt content of pizza sold in foodservice outlets⁵:

- Aim to cook from scratch and use homemade recipes to control the amount of added salt.
- Where possible, choose fresh and whole ingredients instead of processed foods.
- Source ingredient suppliers that offer lower salt or low sodium ingredient options e.g. aim to source products with less than 1.5 g of salt per 100 g or 100 ml.
- Check and compare the salt content on food labels with similar competitor products and select the lower salt option.
- Source low salt or salt free alternative products such as tinned tomatoes, pureé or passata.
- Reduce the amount of salt used when preparing dough for pizza.
- Prepare thinner pizza bases and avoid cheese or meat stuffed pizza crust.
- Select lower salt toppings such as lean meats, mushrooms, sweetcorn, pineapple, rocket.
- Select cheese option with lower salt content such as ricotta and fresh mozzarella cheese.
- Limit the use of high salt products such as cured, processed, smoked meat toppings by offering alternatives or by using a smaller quantity.
- Use cheese toppings sparingly and ensure there is even distribution across the pizza.
- Reduce the size of pizza portions, allowing for fewer toppings and less dough per serving.
- To flavour, use alternatives to salt such as herbs, spices, chilli, garlic, lemon, black pepper, onions, lemon juice etc.
- Incorporate umami rich foods to enhance the umami flavour.
- Remove salt-shakers from dining tables.

⁵ Strategies are adapted and based on guidance recommended in the <u>Healthy eating</u>, food safety and food legislation, a guide supporting the Healthy Ireland Food Pyramid (FSAI, 2019).

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7. Appendix

Appendix 1: Median salt content of pizza sold in the Irish foodservice market

Table 3 provides an overview of the median (IQR) and minimum-maximum (min-max) salt content in a convenience sample of adult and children's pizzas per 100 g and per portion sold by foodservice outlets in 2023 (FSAI, 2024b). Full details of the survey methodology and salt content are published in the <u>Benchmarking the salt content of pizza sold in the foodservice sector in 2023</u> report (FSAI, 2024b).

Table 3 Median (IQR) salt content of pizza subcategories per 100 g and per portion by population type

Salt content in pizza ^(a)		per 100 g		per whole pizza (g/pizza)		per pizza slice (g/slice)		
Population type	Pizza subcategory	(n)	Median (IQR) salt content	Min-max salt content	Median (IQR) salt content	Min-max salt content	Median (IQR) salt content	Min-max salt content
Adults	Cheese-only	12	1.42 (0.21)	1.02–1.60	6.63 (3.06)	3.34-8.05	0.80 (0.30)	0.43–1.55
	Pepperoni, salami, meatballs beef or sausage	21	1.57 (0.30)	1.30–2.08	8.66 (2.00)	4.54–11.01	1.12 (0.42)	0.55–2.80
	Other toppings	14	1.28 (0.29)	0.97–1.60	6.80 (1.73)	4.63-9.44	0.92 (0.28)	0.59–2.61
Children	Cheese-only	4	1.19 (0.13)	1.07-1.60	2.64 (1.92)	1.31–3.82	0.77 (0.40)	0.47–1.31
	Pepperoni, salami, meatballs beef or sausage	4	1.41 (0.19)	1.35–1.88	2.43 (0.60)	1.87–4.04	0.72 (0.65)	0.45–1.87
	Other toppings	5	1.24 (0.30)	0.91–1.78	2.09 (1.90)	1.69–4.68	0.49 (0.34)	0.38–1.03

Data provided as median and interquartile range (IQR), and minimum and maximum values (min-max). (a) All samples were analysed as sold.

Appendix 2: Feasibility of maximum per serving salt targets

The maximum per serving salt targets were established using the median salt content values for each subcategory of pizza for both adults and children. In each subcategory, 50% of pizzas met these salt targets, which exceeds the 33% threshold for target feasibility. Based on this, given half of existing pizza samples have already achieved the maximum per serving salt targets, the targets are considered feasible for each pizza subcategory. This is supported by the distribution of salt in each subcategory of pizza per 100 g, for both adults and children, as shown in Figure 1.

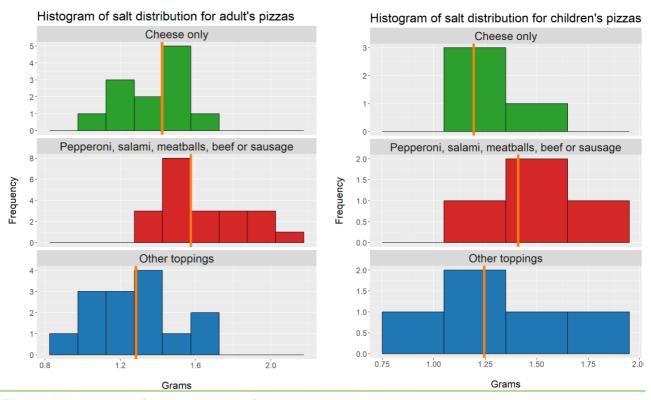


Figure 1 Histogram of salt distribution for adult and children's pizzas



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