

Sausage Rolls: Nutritional Content and Portion Size

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Keywords: Regulating the changing food system, Nutrition in NI, Wider consumer interests

<https://doi.org/10.46756/001c.172276>

FSA Research and Evidence

Fifty-seven sausage roll samples were collected from local non-chain out-of-home (OOH) food businesses serving food-to-go and were analysed to determine their nutritional content and portion size. The samples were generally high in energy (average = 398kcal), saturated fat (average = 11.6g) and contained an average of 1.7g of salt. The largest sample weighed 282g and contained the most energy per portion at 993kcal, which is around half the Reference Intake (RI) for adults; the most saturated fat, 29.5g, more than the daily RI for adults; and the most salt, 5.1g, almost the daily RI for adults. These findings provide baseline data against which reformulation efforts can be measured.

Introduction

Northern Ireland (NI) has the highest reported prevalence of overweight and obesity among Primary 1 children compared with equivalent age groups across the UK ([Public Health Agency \(Northern Ireland\), 2025](#)). Just over a quarter (25.3%) of Primary 1 children and 27% of Year 8 children are living with overweight or obesity. These children are at greater risk of developing conditions including type 2 diabetes, asthma, musculoskeletal problems, heart disease, high blood pressure, low self-esteem, mental ill health and eating disorders. Children living with obesity are also likely to continue to live with obesity into adulthood. In 2024/25, around two-thirds (67%) of adults in NI were living with overweight or obesity ([Department of Health, 2025](#)).

Data shows that NI consumers are not meeting dietary recommendations. Consumers eat more saturated fat and sugar than is recommended and not enough fruit, vegetables, fibre and oily fish ([Food Standards Agency et al., 2025](#)). Around 15% of NI consumers' diets come from food bought and eaten out of the home (increasing to over a quarter when only looking at those that consume food out-of-home (OOH)). Forty-three percent of consumers report buying snacks when out ([Food Standards Agency et al., 2025](#)).

In NI, the Food Standards Agency (FSA) has a remit for dietary health and is committed to making the food environment healthier. The FSA supports food businesses to achieve this through its [Making Food Better](#) programme. As part of this work, the FSA and local councils conduct nutritional sampling with a focus on foods that are produced and sold by local food businesses and that are popular with NI consumers, to better understand the nutritional content and portion size.

Sausage rolls are a popular savoury snack sold by many local food businesses in NI. However, there is limited data on the nutritional content of ready-to-eat sausage rolls sold by the OOH sector (this includes deli counters, bakeries, coffee shops, cafés and restaurants). The FSA and local councils collaborated to assess the portion size and nutritional content of ready-to-eat, single-serve sausage rolls on sale in non-chain OOH businesses across NI. An online search for nutritional information of single-serve, ready-to-eat sausage rolls on sale in chain businesses was also conducted. The findings provide baseline data against which reformulation efforts can be measured.

Objectives

The project objectives were to:

- Generate baseline data on the portion size and nutritional content (energy, total fat, saturated fat and salt) of ready-to-eat, single-serve sausage rolls sampled from non-chain OOH food businesses across NI.
- Gather data on the portion size and nutritional content (energy, total fat, saturated fat and salt) of single-serve, ready-to-eat sausage rolls on sale in chain businesses.
- Compare the nutritional content of sausage rolls sampled from non-chain OOH food businesses in NI with data gathered from an online search of chain businesses.
- Share results of nutritional sampling with businesses and promote reformulation to reduce energy, saturated fat and salt content.

Methods

Sampling

Environmental Health teams from the eleven local councils in NI collected sausage roll samples from food businesses between January and March 2025 using an agreed sampling protocol. The sampling protocol is available on request by emailing DietaryHealthNi@food.gov.uk

Local councils agreed to collect a minimum of three sausage roll samples from local non-chain food businesses that sell food which is ready-to-eat, also known as food-to-go. This was to ensure samples were representative of the sausage rolls on sale across NI. It was agreed that sausage roll samples would be meat-based, ready-to-eat, single-serve portions intended for individual consumption from local non-chain OOH food businesses, using the inclusion and exclusion criteria outlined in [Table 1](#).

Table 1. Inclusion and exclusion criteria for sausage roll sampling

Inclusion	Exclusion
Ready-to-eat, single-serve sausage rolls likely to be eaten by an individual in one eating occasion	Multinational chain cafés or coffee shops such as Costa, Starbucks, Greggs
Local food businesses including deli counters in convenience shops or garages, bakeries, coffee shops, cafés and restaurants that sell sausage rolls made in NI	
Meat-based sausage rolls	Vegetarian or meat substitute sausage rolls

Samples were sent to Public Analyst Scientific Services, an accredited laboratory, for nutritional analysis.

The average, minimum and maximum values for energy, total fat, saturated fat and salt content were calculated per portion and per 100g for all sausage rolls, pork sausage rolls and beef sausage rolls. The percentage of the Reference Intake (%RI) for energy, total fat, saturated fat and salt content of each sample was calculated, and the criteria set out in the UK's recommended Front of Pack Nutrition Labelling (FOPNL) scheme, known as the multiple traffic light label, were applied to the results ([DoH and FSA, 2016](#)).

Online data gathering

An online search of chain businesses selling ready-to-eat, single-serve sausage rolls was conducted in June 2026. The energy, total fat, saturated fat and salt content per portion and per 100g were captured in Microsoft Excel, along with the name of the manufacturer or business selling the sausage roll, link to the data source, name of product and the date the

information was collected. A list of the websites searched and the search terms used is available on request by emailing DietaryHealthNI@food.gov.uk.

Sausage roll multipacks, sharing packs and sausage rolls that required cooking at home were excluded from the data collection.

The average, minimum and maximum values for energy, total fat, saturated fat and salt content were calculated per portion and per 100g. The %RI for energy, total fat, saturated fat and salt was calculated and the criteria set out in the UK's FOPNL scheme were applied to the collected data ([DoH and FSA, 2016](#)).

Results

Sampling results from non-chain OOH businesses

Between January and March 2025, local councils sampled a total of 61 sausage rolls. Four samples were excluded due to incomplete data, leaving 57 samples for analysis. [Table 2](#) outlines the number of samples by meat type. Sixty-eight percent of sausage rolls were made from pork, 30% were made from beef and 2% were made from a mixture of pork and beef.

Table 2. Number of sausage roll samples collected from non-chain OOH businesses by meat type

Sausage roll meat type	Number of samples
Pork	39
Beef	17
Pork and beef	1
Total	57

Anonymised data tables containing full nutritional analysis results are available on request by emailing DietaryHealthNI@food.gov.uk.

Results per portion

Average, minimum and maximum weights and nutritional content per portion are set out in [Table 3](#). There is little difference in the average weight, energy, total fat, saturated fat and salt content of the samples per portion by meat type. However, there is a wide range in the content of these nutrients across samples, with larger sausage roll samples containing more energy, total fat, saturated fat and salt per portion than smaller samples.

Table 3. Average, minimum and maximum weight and nutritional content per portion of sausage rolls sampled from non-chain OOH businesses, by sausage roll type

Sausage roll type	Average weight (range)	Average energy per portion (range)	Average total fat per portion (range)	Average saturated fat per portion (range)	Average salt per portion (range)
All sausage rolls from non-chain businesses	118.9g (37-282g)	398kcal (129-993kcal)	24.8g (7.2-74.7g)	11.6g (3.6-29.5g)	1.7g (0.3-5.1g)
Pork sausage rolls	121.3g (37-282g)	409kcal (129-993kcal)	26.2g (7.2-74.7g)	12.0g (3.6-29.5g)	1.8g (0.3-5.1g)
Beef sausage rolls	114.4g (74-172g)	365kcal (267-605kcal)	21.8g (15.4-37.7g)	11.1g (7.7-19.7g)	1.4g (0.6-2.8g)

The distribution of nutritional content by %RI is set out in [Table 4](#). The majority (82%) of sausage rolls contained less than a quarter of the RI for energy. For total fat, the majority (63%) contained between a quarter and a half of the RI with 2% containing more than the RI. For saturated fat, the largest proportion of samples (40%) contained between half and three quarters of the RI with 5% containing more than the RI. For salt, the majority (49%) contained less than a quarter of the RI.

Table 4. Distribution of nutritional content by percentage of Reference Intake (RI) for sausage rolls sampled from non-chain OOH businesses.

	Energy	Total fat	Saturated fat	Salt
Percentage of samples that contain <25% of RI	82%	21%	11%	49%
Percentage of samples that contain 25% to <50% of RI	18%	63%	32%	42%
Percentage of samples that contain 50% to <75% of RI	0%	11%	40%	7%
Percentage of samples that contain 75% to <100% of RI	0%	4%	12%	2%
Percentage of samples that contain ≥100% RI	0%	2%	5%	0%

The sausage rolls sampled were loose, rather than prepacked, and therefore not legally required to have a nutritional label. To provide context and allow for comparison with the data gathered from chain businesses, colour coding used in the UK's FOPNL scheme (multiple traffic light labelling) was applied to the samples collected from non-chain OOH food businesses ([DoH and FSA, 2016](#)). The average total fat and saturated fat content of the samples was classified as high, which would result in a red label, while the average salt content was classified as medium, which would result in an amber label (see [Table 5](#)).

Table 5. Multiple traffic light labelling for the average sausage roll sampled from non-chain OOH businesses (118.9g)

	Energy	Total fat	Saturated fat	Salt
	398kcal	24.8g	11.6g	1.7g
Percent of an adult's RI	20%	35%	58%	28%

According to the criteria set out in the UK's FOPNL scheme, the majority (86%) of sausage rolls sampled were classified as high in total fat and would have a red label for this nutrient. All the sausage roll samples were classified as high in saturated fat and would therefore all have a red label for this nutrient. Forty-four percent of the sausage rolls sampled were classified as high in salt and would have a red label, while 56% were classified as having a medium salt content and would have an amber label.

Results per 100g

Results per 100g are set out in [Table 6](#). There is little difference in the average energy, total fat, saturated fat and salt content of the samples per 100g. However, there is a wide range in the content of these nutrients across samples.

Table 6. Average, minimum and maximum nutritional content per 100g of sausage rolls sampled from non-chain OOH businesses, by sausage roll type

Sausage roll type	Average energy per 100g (range)	Average total fat per 100g (range)	Average saturated fat per 100g (range)	Average salt per 100g (range)
All sausage rolls from non-chain businesses	332kcal (269-413kcal)	20.5g (13.6-32.6g)	9.8g (6.6-13.9g)	1.4g (0.8-2.3g)
Pork sausage rolls	338kcal (280-413kcal)	21.2g (14.7-32.6g)	9.9g (6.6-13.9g)	1.5g (0.8-2.3g)
Beef sausage rolls	320kcal (269-362kcal)	19.2g (13.6-22.8g)	9.6g (6.9-12.1g)	1.2g (0.8-1.7g)

Data from chain businesses

An online search of chain businesses selling ready-to-eat, single-serve sausage rolls was conducted in June 2026. Fifteen sausage rolls were identified that met the criteria. Ten were available from grocery retailers and five from OOH chain businesses. The data collected is available on request by emailing DietaryHealthNI@food.gov.uk.

Results per portion

Average, minimum and maximum weights and nutritional content per portion are set out in [Table 7](#). There is little difference in the average weight, energy, total fat, saturated fat and salt content of the sausage rolls

from grocery retailers and those from OOH chain businesses. The average values are similar to the sausage rolls sampled from non-chain OOH food businesses in NI.

Table 7. Average, minimum and maximum weight and nutritional content per portion of sausage rolls from chain businesses

	Average weight (range)	Average energy per portion (range)	Average total fat per portion (range)	Average saturated fat per portion (range)	Average salt per portion (range)
All sausage rolls from chain businesses	121.9g (90 – 145g)	401kcal (282 – 513 kcal)	25.8g (12.3 – 37.5g)	11.5g (5.5 – 16.0g)	1.4g (0.7 – 2.2g)
Sausage rolls available from grocery retailers	122.5g (90 – 145g)	414kcal (282 – 513kcal)	27.1g (12.3 – 37.5g)	11.7g (5.5 – 16.0g)	1.4g (0.7 – 2.2g)
Sausage rolls available from OOH chain businesses	120.6g (103 – 130g)	374kcal (346 – 410kcal)	23.3g (17.0 – 26.7g)	11.2g (7.9 – 13.4g)	1.3g (1.1 – 1.5g)

The distribution of nutritional content by %RI is set out in [Table 8](#). The majority (93%) of sausage rolls contained less than a quarter of the RI for energy. For total fat, the majority (67%) contained between a quarter and a half of the RI. For saturated fat, the majority (53%) contained between half and three quarters of the RI. For salt, the majority (60%) contained less than a quarter of the RI.

Table 8. Distribution of nutritional content by percentage of Reference Intake (RI) for sausage rolls available from chain businesses

	Energy	Total fat	Saturated fat	Salt
Percentage of samples that contain <25% of RI	93%	20%	0%	60%
Percentage of samples that contain 25% to <50% of RI	7%	67%	27%	40%
Percentage of samples that contain 50% to <75% of RI	0%	13%	53%	0%
Percentage of samples that contain 75% to <100% of RI	0%	0%	20%	0%
Percentage of samples that contain ≥100% RI	0%	0%	0%	0%

Colour coding used in the UK's FOPNL scheme was applied to the data collected from chain businesses. The average total fat and saturated fat content of the sausage rolls from chain businesses was classified as high, which would result in a red label, while the average salt content was classified as medium, which would result in an amber label ([Table 9](#)).

Table 9. Multiple traffic light labelling for the average sausage roll from chain businesses (121.9g)

	Energy	Total fat	Saturated fat	Salt
	401kcal	25.8g	11.5g	1.4g
Percent of an adult's RI	20%	37%	57%	23%

According to the criteria set out in the UK's FOPNL scheme, most sausage rolls from chain businesses were classified as high in total fat (80%) and saturated fat (93%) and would have a red label for these nutrients. Seventy-three percent of the sausage rolls were classified as having a medium amount of salt and would have an amber label for this nutrient.

Results per 100g

Results per 100g are set out in [Table 10](#). There is little difference in the average energy, total fat, saturated fat and salt content of the samples per 100g. However, there is a wide range in the content of these nutrients across samples. The average values are similar to the sausage rolls sampled from non-chain OOH food businesses in NI.

Table 10. Average, minimum and maximum nutritional content per 100g of sausage rolls from chain businesses

	Average energy per 100g (range)	Average total fat per 100g (range)	Average saturated fat per 100g (range)	Average salt per 100g (range)
All sausage rolls from chain businesses	329kcal (252 – 401kcal)	21.3g (10.2 - 31.4g)	9.5g (4.6 - 13.1g)	1.2g (0.7 - 1.8g)
Sausage rolls available from grocery retailers	338kcal (252 – 401kcal)	22.1g (10.2 - 31.4g)	9.5g (4.6 - 13.1g)	1.2g (0.7 - 1.8g)
Sausage rolls available from OOH chain businesses	311kcal (266 – 349kcal)	19.7g (13.1 - 23.6g)	9.5g (6.1 - 12.2g)	1.2g (0.9 - 1.5g)

Discussion

This study provides baseline data on the portion size and nutritional content of ready-to-eat, single-serve sausage rolls sold by non-chain OOH food businesses in NI. It also brings together data on the portion size and nutritional content of ready-to-eat, single-serve sausage rolls on sale from chain businesses.

The sausage rolls sampled from non-chain OOH businesses in NI were generally high in energy, total fat and saturated fat, and 44% were classified as high in salt. Portion size is a key driver of nutritional content, with larger sausage rolls generally containing more energy, total fat, saturated fat and salt per portion, however product composition is also

important. The average portion size and nutritional content of sausage rolls from non-chain OOH businesses in NI were similar to those on sale in chain businesses. However, there was a marked difference when the largest products were compared. The largest sausage roll sampled from a non-chain OOH business was considerably larger and contained substantially more energy, total fat, saturated fat and salt than the largest sausage roll available from a chain business. This suggests that there may be particular scope to reduce portion size and reformulate some of the larger sausage rolls sold by non-chain OOH businesses.

When compared with dietary recommendations, the findings are concerning. The largest sausage roll sampled from a non-chain OOH business in NI weighed 282g and contained:

- 993kcal, around half the adult RI for energy of 2000kcal per day.
- 74.7g of total fat, over the adult RI of 70g per day.
- 29.5g of saturated fat, over the adult RI of 20g per day.
- 5.1g of salt, just under the adult RI of 6g per day.

By comparison, the largest sausage roll available from chain businesses weighed 145g. It was high in energy, total fat and saturated fat with a moderate salt content. It contained less energy, total fat, saturated fat and salt than the largest sausage roll sampled from non-chain OOH businesses in NI:

- 458kcal, just under a quarter of the daily RI for energy.
- 26.6g of total fat, 38% of the daily RI.
- 11.7g of saturated fat, 59% of the daily RI.
- 1.1g of salt, 18% of the daily RI.

However, the largest sausage roll by weight was not the chain product with the highest energy, total fat or saturated fat content, indicating that product composition, as well as portion size, influenced nutritional content.

Forty percent of the sausage rolls sampled from non-chain OOH businesses in NI and 27% of sausage rolls available from chain businesses were classified as high in all three nutrients, total fat, saturated fat and salt using the criteria set out in the UK's FOPNL scheme and would have red labels for these nutrients. Only one sausage roll, which was from a chain business, had a total fat, saturated fat and salt content low enough to meet the medium content criteria and have amber labels for these nutrients.

When looking at the results per 100g, there was a wide range in the energy, total fat, saturated fat and salt content across samples. Sausage rolls available from chain businesses generally contained less salt per 100g than those sampled from non-chain OOH businesses in NI. This indicates that there may be scope to reformulate recipes to reduce these nutrients while maintaining consumer acceptability.

Conclusion

This study provides valuable baseline data on the portion size and nutritional content of ready-to-eat, single-serve sausage rolls sampled from non-chain OOH food businesses across NI, alongside data gathered online for sausage rolls available from chain businesses.

Although the average portion size and nutritional content were similar across the two groups, there was a wide range in the results. The largest sausage roll sampled from a non-chain OOH food business contained substantially more energy, total fat, saturated fat and salt than the largest sausage roll available from a chain business.

When considered per 100g, sausage rolls available from chain businesses had a slightly lower average salt content. One sausage roll available from a chain business also met the medium criteria for total fat, saturated fat and salt and would have amber labels for these nutrients. This indicates that there may be scope for non-chain OOH food businesses to reduce the portion size of larger products and reformulate recipes to reduce energy, total fat, saturated fat and salt.

Acknowledgements

The Food Standards Agency would like to thank Environmental Health Officers (EHOs) from the eleven local councils in NI. EHOs led and funded the sampling and nutritional analysis of sausage rolls and contributed to the preparation of the final report.

Published: October 21, 2026 BST.



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Supplementary Materials

Sausage rolls infographic: Nutritional content and portion size

Download: <https://science.food.gov.uk/article/172276-sausage-rolls-nutritional-content-and-portion-size/attachment/370569.png>
