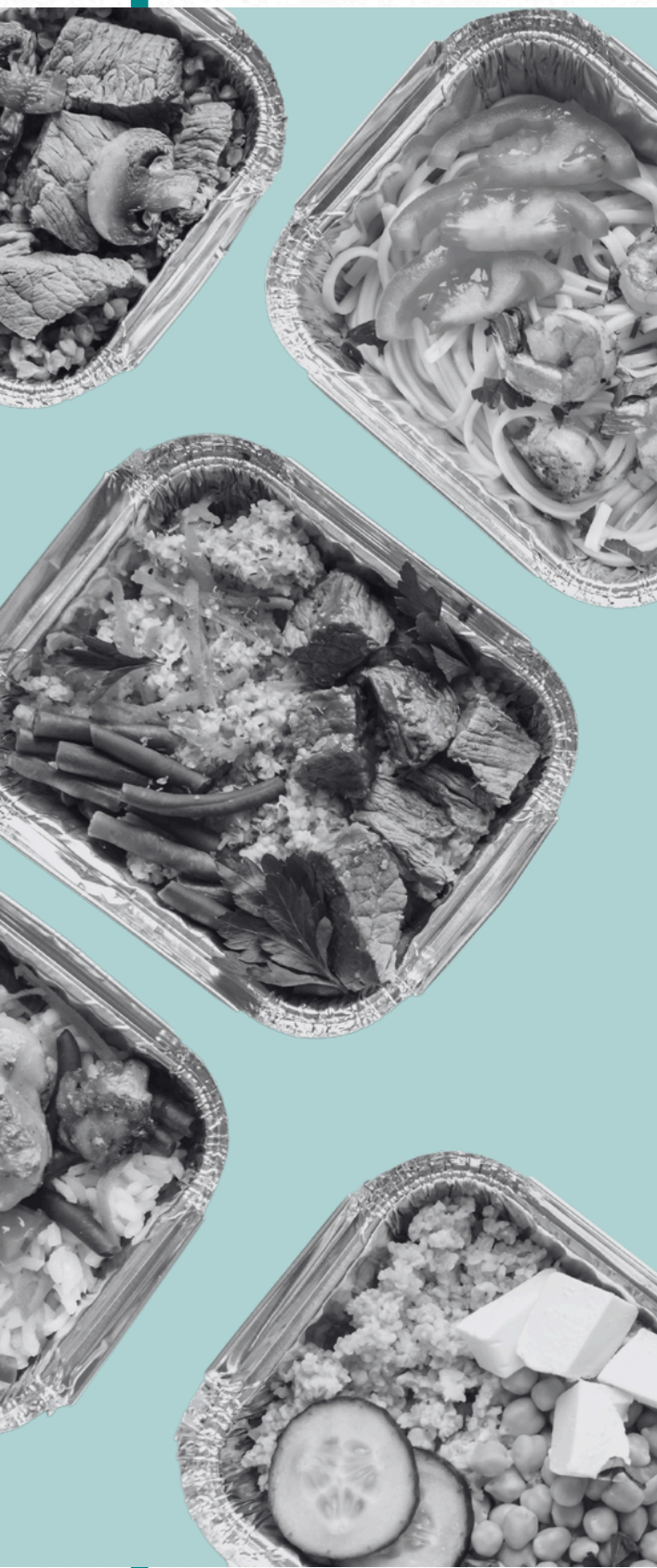




Are Ready Meals Ready for a Change?

A Call for Stronger
Nutritional
Policies

Overview

This report provides a comprehensive analysis of the nutritional composition of ready meals currently available across the UK retail market. Based on a detailed review of 1,511 chilled and frozen ready meals from 11 major retailers, it offers critical insight into the contribution of these products to salt intake and broader dietary factors.

Average population salt intake remains substantially above recommended levels, with ready meals among the top contributors in UK diets. Over half (56%) of ready meals assessed were high in salt, 42% high in saturated fat, and 71% low in fibre. Notably, one in five products were high in salt, fat, and saturated fat simultaneously, based on front-of-pack labelling thresholds. Variation in cost, availability and accessibility means that despite it looking like consumers have a choice, fair options do not exist. Retail and branded product performance also varied, but concerningly, several companies had a large proportion of their portfolio with excessive levels of salt despite often meeting voluntary maximum salt reduction targets.

All ready meals have the ability to be made healthier, with less salt and saturated fat and more fibre, as shown by this research. Stagnated and inconsistent efforts to reduce salt in processed foods emphasises the urgent need for a new policy direction. Stronger regulatory measures, such as mandatory reformulation targets and fiscal levers for businesses who fail to comply, must be seriously considered if the government is to meet its commitments to improve national health outcomes and reduce inequalities. As dietary salt remains a major modifiable risk factor for non-communicable disease, policy inaction is tantamount to accepting avoidable harm to the public.

Protecting public health requires not only collaboration with the food industry but also the political will to hold it accountable when it fails to act in the public interest.



Government Recommendations

Revitalise the National Salt Reduction Programme as a Public Health Priority

The government must re-establish salt reduction as a core pillar of its strategy to improve population health, recognising the strong link between high salt consumption and increased risk of hypertension, stroke, and heart disease. This includes showing strong leadership, increased resources, and cross-departmental collaboration to drive salt reduction across the food industry.

Conduct an Immediate Review of the Outdated 2024 Salt Reduction Targets

With the 2024 salt targets deadline now passed, the government must urgently evaluate industry compliance and publish a comprehensive report to evaluate industry progress and identify areas where targets have been too lenient or missed. This review should be transparent, providing a clear path for the next phase of policy and enforcement.

Develop a Long Term Salt Reduction Plan with Mandatory Targets

The government should introduce a new, bold salt reduction strategy that includes more ambitious salt targets for food businesses. These should be challenging yet achievable and legally enforceable, with financial penalties for non-compliance.

Consider Fiscal Levers on Unhealthy Food

Building on the success of the Soft Drink Industry Levy to encourage businesses to actively engage in reformulation.



Food Industry Recommendations

Adopt Front of Pack Colour Coded Labelling on all Food and Drink

Companies should adopt the government's front of pack colour coded labelling system on their complete food and drink portfolio. At a minimum, this would provide clearer information to consumers to help with healthier food choices. But it will also incentivise companies to limit red warnings on salt, fat and saturated fat.

Commit to Reformulation Targets for Salt and Calories

Food manufacturers and retailers should actively support and comply with reformulation targets for salt and other key nutrients. This includes prioritising lower salt recipes across all ready meal product lines.

Increase Availability and Visibility of Healthier Ready Meal Options

Retailers must expand their range of lower salt ready meals, including increased availability of vegetarian and plant-based options with improved nutritional profiles. These products should be competitively priced, clearly labelled, and prominently positioned in stores and online.

Introduction

Ready meals are a staple of modern diets, notably due to their convenience, widespread accessibility, and affordability. Nearly three quarters of UK adults consumed chilled ready meals between March and May 2024 [1], and a national poll conducted by Censuswide found nearly one in two consumers (41%) reported eating ready meals at least once a week, with 18% of them eating them twice a week [2]. It is thus a key market for the retail sector, contributing to more than £4 billion in annual sales in 2024 [3]. Yet, whilst convenient, these products are often less nutritious than a home-cooked meal.

Across the UK population, average calorie intake continues to exceed recommended levels, contributing to high rates of overweight and obesity. Over two-thirds of adults in England are living with overweight and obesity, which significantly increases their risk of type 2 diabetes, cardiovascular disease, and certain cancers [4]. Saturated fat intake also remains above the recommended limit of 10% of daily energy intake, while most adults fail to meet the recommended 30g daily intake of fibre [5].

There is strong evidence linking increased salt consumption to raised blood pressure, the leading risk factor for heart disease and stroke, responsible for one death every four minutes in the UK [6]. The annual healthcare costs to NHS England are estimated at £10 billion, with the wider economic burden totalling around £24 billion every year [7]. The UK Government recommends a maximum salt intake of 6g/day in adults, yet the current average intake is 40% higher than this, at 8.4g [8]. The majority of salt in the UK diet is already added in the foods we buy, with ready meals amongst the top three food categories contributing the most to UK diets. Ready meals are in fact one of three food categories within the salt programme that make up nearly half the volume sales and more than 50% of total salt sales [9].

In recognising the dangers of high salt consumption, the UK was once a global leader in salt reduction. The Food Standards Agency's pioneering voluntary salt targets, first introduced in 2006, showed early success, prompting widespread reformulation and a modest decline in average salt intake [10]. However, progress has since stalled. Research shows that average population salt intakes have been rising since 2014, as responsibility for salt policy shifted and food industry influence grew. In 2020, revised voluntary targets for 2024 were published, aiming to reinvigorate momentum in reducing salt across key food categories [11], yet compliance is unknown due to a lack of monitoring or reporting despite commitments from the Department of Health to review progress in 2022. Voluntary approaches have delivered limited success in recent years, and reliance on industry goodwill is proving increasingly insufficient.

This report presents a detailed analysis of the nutritional composition of ready meals available in England, to provide insight into dietary habits and salt consumption. Chilled and frozen complete ready meals (with an accompaniment such as rice, potato or vegetables), available for purchase in major retailers across England, were surveyed, and comparisons were made against several government initiatives designed to improve the nutritional quality of packaged food. Further details of the methodology and inclusion criteria can be found in Annex 1.

Overall Nutritional Content

The nutritional profile of 1,511 complete ready meals were assessed, along with ingredients and price. The majority of ready meals collected were chilled (67%), with chilled ready meals slightly lower in salt per 100g (0.53g vs 0.57g) and per serve (2.00g vs 2.14g) on average, than frozen ready meals. Most ready meals were retailer own brand (76%), containing, on average, slightly less salt and fibre per serve, but slightly higher energy, fat, saturated fat and fibre (Table 1).

In a suggested serving size, energy ranged from 164kcal to 1092kcal, saturated fat ranged from 0.3g to 27.7g and salt ranged from 0.40g to 6.40g. Fibre content had an average of 5.8g per serving, ranging from 0.3g to 28.4g per serve. The meals that appeared most frequently on shelves are listed in Table 1, and within each subcategory, there were significant variations between the highest and lowest energy and nutrient content, per 100g and per serve. This gives a clear indication that reformulation is possible, in terms of technical feasibility as well as consumer acceptance (Table 1 and Figures 1-3).

Table 1. Average (range) energy, fat, saturated fat, fibre and salt content for ready meals, split by business type and category

Category (number of products)	Energy kcal/serve (range)	Fat g/serve (range)	Saturated Fat g/serve (range)	Fibre g/serve (range)	Salt g/serve (range)
All (1511)	476 (164 - 1092)	16.9 (1.1 - 56.6)	6.4 (0.3 - 27.7)	5.8 (0.3 - 28.4)	2.04 (0.40 - 6.40)
Manufacturer (363)	472 (202 - 1092)	16.2 (1.1 - 56.6)	6.1 (0.4 - 27.7)	6.6 (0.7 - 28.4)	2.33 (0.40 - 6.40)
Retailer (1148)	478 (164 - 913)	17.1 (1.3 - 47.6)	6.4 (0.3 - 27.1)	5.6 (0.3 - 28.0)	1.96 (0.62 - 5.30)
Lasagne (113)	498 (237 - 769)	22.3 (4.4 - 41.7)	9.8 (1.3 - 21.3)	5.0 (0.7 - 20.0)	2.15 (0.72 - 3.90)
Pasta bake (75)	532 (396 - 752)	19.0 (8.5 - 36.8)	7.8 (2.8 - 18.1)	5.5 (1.8 - 9.6)	1.91 (1.00 - 3.52)
Cottage pie (71)	391 (225 - 570)	16.2 (2.3 - 34.8)	7.4 (0.4 - 17.9)	4.9 (2.0 - 12.0)	1.99 (0.87 - 6.12)
Macaroni cheese (63)	610 (335 - 1092)	26.0 (7.4 - 47.6)	14.4 (2.8 - 27.7)	4.1 (1.8 - 11.9)	2.20 (1.02 - 4.20)
Tikka curry (63)	508 (285 - 828)	17.7 (2.3 - 56.6)	6.1 (0.9 - 26.8)	6.3 (2.3 - 12.6)	1.91 (0.72 - 4.68)
Bolognese (48)	457 (230 - 680)	15.1 (2.0 - 36.0)	5.9 (0.7 - 14.0)	5.2 (2.3 - 10.8)	1.83 (0.51 - 4.35)
Fish pie (38)	405 (164 - 564)	16.3 (4.2 - 30.4)	8.1 (2.2 - 14.6)	3.3 (1.6 - 5.2)	1.91 (0.90 - 2.93)
Roast dinner (38)	395 (252 - 715)	10.6 (2.2 - 38.3)	2.5 (0.6 - 8.0)	6.7 (3.8 - 10.4)	1.83 (0.67 - 3.30)
Hot pot (35)	407 (257 - 544)	16.0 (5.0 - 31.2)	5.9 (0.8 - 15.8)	5.4 (3.0 - 8.4)	1.97 (1.04 - 3.38)
Chilli (33)	437 (282 - 644)	11.3 (2.1 - 24.5)	3.7 (0.4 - 9.7)	11.6 (2.3 - 28.4)	1.62 (0.70 - 2.52)
Carbonara (33)	550 (395 - 748)	22.8 (9.2 - 37.0)	10.8 (4.4 - 16.4)	3.4 (1.9 - 6.4)	2.08 (1.42 - 3.30)
Sweet & Sour (33)	506 (282 - 807)	10.2 (1.3 - 28.8)	1.8 (0.4 - 6.9)	4.4 (2.4 - 8.2)	1.70 (0.64 - 2.85)

Nearly 1 in 2 (45%) ready meals contained 2g or more salt per serve, and 1 in 10 meals contained 3g or more salt per serve, which is half the recommended limit for an adult's daily salt intake.

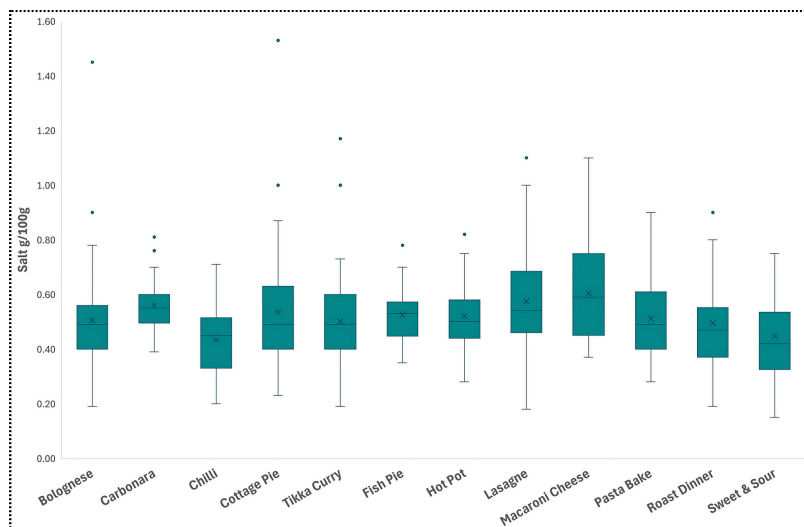


Figure 1. Mean, median, upper and lower quartiles, minimum and maximum salt content per 100g for ready, split by most prominent sub-categories

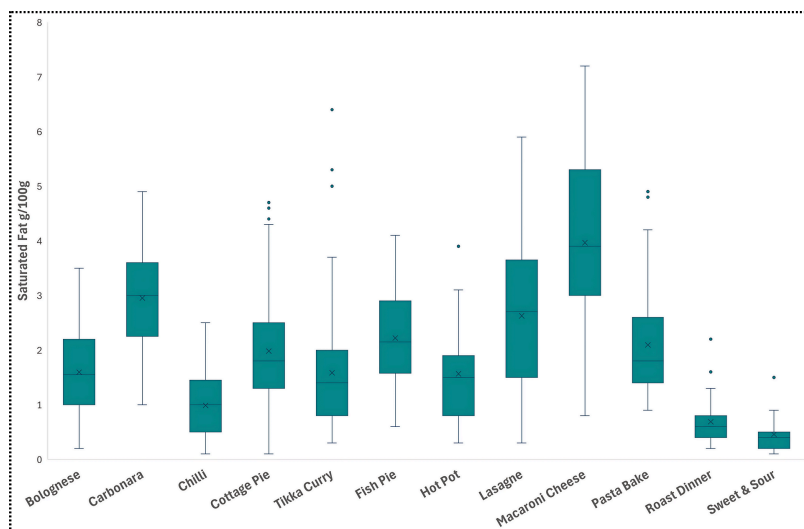


Figure 2. Mean, median, upper and lower quartiles, minimum and maximum saturated fat content per 100g for ready, split by most prominent sub-categories

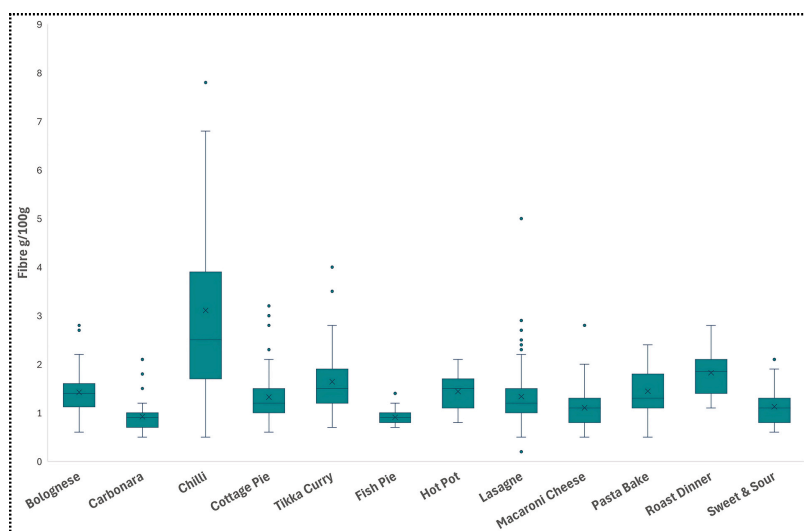


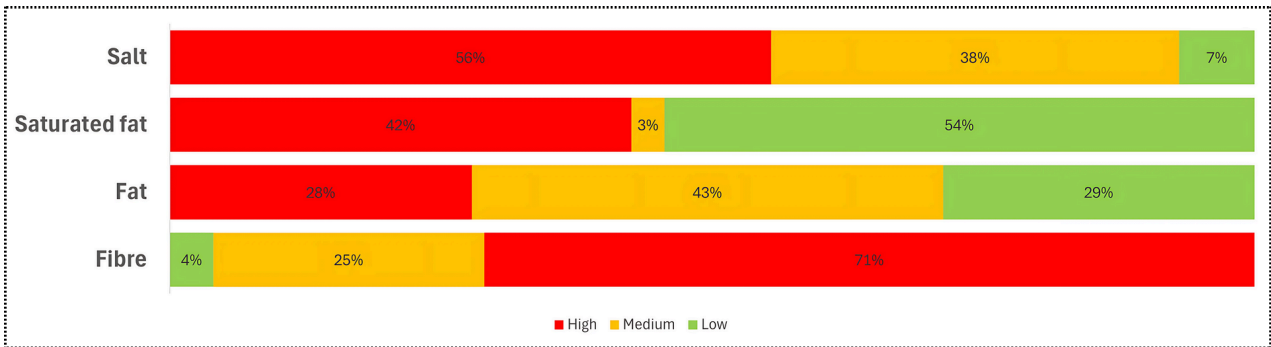
Figure 3. Mean, median, upper and lower quartiles, minimum and maximum fibre content per 100g for ready, split by most prominent sub-categories

Front of Pack Colour Coded Nutrition Labelling

Of the 1,511 products, 28% were high in fat, 42% high in saturated fat, and 56% high in salt according to the governments colour coded front of pack labelling criteria, and only 7% were low in salt (Figure 4). One in five meals (20%) were high in fat, saturated fat and salt simultaneously.

Only 4% of ready meals would qualify for a 'high in fibre' claim, with 71% containing low fibre content.

Figure 4. Mean, median, upper and lower quartiles, minimum and maximum fibre content per 100g for ready, split by most prominent sub-categories



*High, medium and low criteria for salt, saturated fat and fat is based on the UK Government's guidance on front-of-pack labelling [12].
High, medium and low criteria for fibre is based on Regulation (EC) No 1924/2006 [13].

Iceland was the retailer with the greatest proportion of ready meals high in salt (86%), with Aldi and Lidl following close behind (70% and 64% respectively) (Table 2). Aldi had the greatest number of ready meals high in saturated fat (51%), followed by Lidl (49%), M&S (48%), Morrisons and Waitrose (both at 46%) (Table 2).

Table 2. Proportion of ready meals high in fat, saturated fat, and salt, and low in fibre split by retailer

Retailer	Number of products	High in Fat	High in Saturated Fat	High in Salt	Low in Fibre
Iceland	69	26%	41%	86%	87%
Aldi	63	29%	51%	70%	76%
Lidl	97	33%	49%	64%	68%
M&S	164	38%	48%	54%	74%
Sainsbury's	194	27%	41%	54%	78%
Asda	123	20%	44%	50%	66%
Waitrose	63	29%	46%	48%	78%
Tesco	190	24%	42%	45%	73%
Co-op	59	22%	44%	44%	83%
Morrisons	126	22%	46%	40%	76%

All ready meals produced by Wasabi, Jamie Oliver and Kitchen Joy were high in salt, followed by 91% of Charlie Bigham's ready meals, and 89% of Royal and Saputo Dairy UK (Table 3). Saputo Dairy, Jamie Oliver, Charlie Bigham's, Royal and Bakkavor have a notably high proportion of their ready meals high in fat, saturated fat and/or salt, with 100% of Jamie Oliver's and Saputo Dairy UK's ready meals also low in fibre.

The Gym Kitchen and Weight Watchers were the only two companies with no reported ready meals high in fat, saturated fat or salt.

Table 3. Proportion of ready meals high in fat, saturated fat and salt, and low in fibre, split by company

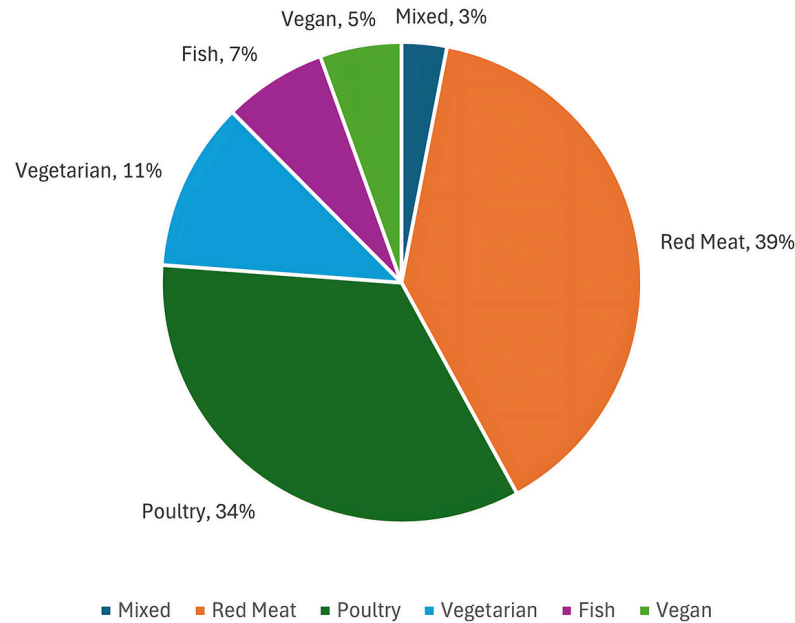
Company*	Number of products	High in Fat	High in Saturated Fat	High in Salt	Low in Fibre
Jamie Oliver	6	83%	83%	100%	100%
Kitchen Joy	6	0%	67%	100%	83%
Wasabi	23	22%	17%	100%	83%
Charlie Bigham's	45	73%	84%	91%	93%
Saputo Dairy UK	9	100%	100%	89%	100%
Royal	9	100%	67%	89%	89%
Kershaws Frozen Foods Ltd	8	0%	25%	88%	13%
Strathmore Foods	7	43%	71%	86%	57%
Bakkavor	5	60%	80%	80%	80%
Harry's Country Kitchen	13	54%	62%	77%	62%
Zizzi	8	63%	63%	75%	75%
Slimming World	35	0%	0%	71%	31%
Deliciously Ella	15	13%	7%	53%	7%
Premier Foods (Kerry Foods)	10	0%	20%	50%	60%
General Mills	7	29%	29%	43%	71%
Nomad Foods	12	33%	25%	42%	33%
Myprotein	31	0%	3%	42%	61%
Young's Seafood Ltd	7	14%	29%	14%	71%
Kirsty's	19	0%	11%	11%	42%
BOL	10	0%	0%	10%	0%
The Gym Kitchen	17	0%	0%	0%	29%
Weight Watchers	6	0%	0%	0%	33%

*Only companies with 5 or more products included

Nutritional Variations Among Protein Options

The vast majority of ready meals available in major supermarkets were meat-based, with only a limited selection of vegan options (Figure 5).

Figure 5. Availability of meat, fish, vegetarian and vegan ready meals.



Meals made up of a combination of proteins (i.e. beef and poultry and fish) and vegetarian meals had the highest average energy content per serve, followed by poultry (Table 4). Ready meals with a combination of proteins also contained the highest average salt, followed by red meat and poultry. Vegan ready meals had a more favourable nutrition profile, averaging the lowest energy, fat, saturated fat and salt content, and the highest fibre content per serve.

Table 4. Average (range) energy, fat, saturated fat, fibre and salt content for ready meals, split by protein element

Protein (number of products)	Energy kcal/serve (range)	Fat g/serve (range)	Saturated Fat g/serve (range)	Fibre g/serve (range)	Salt g/serve (range)
Mixed (46)	495 (325 - 717)	15.7 (3.3 - 30.7)	5.5 (0.6 - 19.6)	5.4 (1.8 - 11.6)	2.44 (1.40 - 4.67)
Red Meat (589)	478 (225 - 1092)	19.0 (2.0 - 55.5)	7.8 (0.6 - 23.6)	5.4 (0.5 - 27.4)	2.10 (0.40 - 6.12)
Poultry (516)	486 (252 - 828)	14.9 (1.3 - 56.6)	4.6 (0.4 - 26.8)	5.7 (0.3 - 17.7)	2.03 (0.42 - 6.40)
Vegetarian (172)	495 (240 - 913)	18.6 (1.1 - 47.6)	8.3 (0.3 - 27.7)	6.3 (2.0 - 24.0)	1.96 (0.62 - 4.98)
Fish (105)	437 (164 - 708)	15.9 (2.2 - 33.6)	6.1 (0.6 - 15.7)	4.8 (1.6 - 17.0)	1.93 (0.80 - 4.80)
Vegan (83)	401 (202 - 741)	12.7 (2.1 - 28.0)	3.5 (0.4 - 20.0)	10.3 (1.8 - 28.4)	1.85 (0.86 - 4.28)

Cost

To look at whether there is a relationship between the cost of ready meals and their nutritional content, products were split into 4 price categories per serve. Of those with a recorded price (1457), most of the ready meals surveyed cost between £3.01 and £4.50 per serving. Premium products, i.e. those that cost £4.51 or more, contained, on average, higher levels of energy, fat, saturated fat and salt per serve than those that cost less. Interestingly, the ready meals with the lowest price point ($\leq$ £1.50) contained the lowest levels of energy, fat, saturated fat and salt per serve, on average.

Table 5. Average energy, fat, saturated fat, fibre and salt content for ready meals, split by cost

Price per serve	Number of products	Average serving size (g)	Average Energy kcal/serve	Average Fat g/serve	Average Saturated Fat g/serve	Average Fibre g/serve	Average Salt g/serve
$\leq$ £1.50	68	373	434	12.0	4.8	5.1	1.97
£1.51 - £3.00	437	383	459	15.9	6.2	5.9	2.00
£3.01 - £4.50	734	400	481	16.8	6.2	5.8	2.01
$\geq$ £4.51	218	394	516	20.8	7.6	5.7	2.34

Across the price categories, the most expensive ready meals ($\geq$ £4.51) had the least compliance to UK government's voluntary guidelines, with 33% of products high in fat, saturated fat and salt simultaneously, 5% exceeding the maximum salt targets, 31% exceeding the maximum calorie targets and with 7% of products classified as HFSS.

Table 6. Proportion of products complying with government guidelines, split by cost

Price per serve	Proportion of products high in fat, saturated fat and salt simultaneously	Proportion of products exceeding the maximum salt targets	Proportion of products exceeding the maximum calorie targets	Proportion of products that are HFSS
$\leq$ £1.50	6%	4%	6%	3%
£1.51 - £3.00	16%	5%	14%	4%
£3.01 - £4.50	19%	3%	23%	3%
$\geq$ £4.51	33%	5%	31%	7%

Compliance to Government Guidelines

1) Nutrient Profiling Score

Overall, 4% of ready meals would be classified as high in fats, salt and sugars (HFSS) according to the Nutrient Profile Model (NPM), with manufacturers having a higher proportion of products that are HFSS (10% vs 2%) (Table 7).

Fewer than half (47%) of all retailers and manufacturers combined, with 5 or more ready meals included in this survey, had 100% compliance with HFSS guidelines, including retailers Tesco, Waitrose and Co-op, and manufacturers Slimming World, MyProtein and Gym Kitchen.

Ready meals from Royal had the highest proportion of products classed as HFSS (44%), followed by Strathmore Foods (43%) and Saputo Dairy UK (33%). The manufacturer with the greatest number of ready meals - Charlie Biggam's - had one in five of its ready meals (22%) classed as HFSS.

Table 7. Company average NPM score (range) and proportion of their portfolio which are HFSS

Company*	Number of products	Average NPM score (range)	Proportion of products that are HFSS
All products	1511	0 (-8 - 12)	4%
Manufacturer	363	0 (-8 - 12)	10%
Retailer	1148	-1 (-8 - 11)	2%
Strathmore Foods	7	3 (-1 - 5)	43%
Royal	9	3 (-3 - 11)	44%
Saputo Dairy UK	9	4 (1 - 11)	33%
Zizzi	8	1 (-2 - 4)	25%
Charlie Biggam's	45	2 (-2 - 12)	22%
Kitchen Joy	6	3 (0 - 4)	17%
Harry's Country Kitchen	13	0 (-6 - 4)	8%
Iceland	69	1 (-3 - 11)	7%

Deliciously Ella	15	-1 (-4 - 4)	7%
Kirsty's	19	-1 (-4 - 4)	5%
Lidl	97	-1 (-7 - 10)	5%
Wasabi	23	1 (0 - 4)	4%
M&S	164	-1 (-7 - 10)	3%
Sainsbury's	194	0 (-6 - 11)	2%
Morrisons	126	-1 (-8 - 4)	2%
Aldi	63	0 (-6 - 4)	2%
Asda	123	-1 (-5 - 10)	1%
Tesco	190	-1 (-6 - 3)	0%
Waitrose	63	-1 (-5 - 2)	0%
Co-op	59	0 (-4 - 3)	0%
Slimming World	35	-3 (-5 - 1)	0%
Myprotein	31	-3 (-6 - -1)	0%
The Gym Kitchen	17	-4 (-5 - -2)	0%
Nomad Foods	12	0 (-3 - 3)	0%
BOL	10	-4 (-8 - 1)	0%
Premier Foods (Kerry Foods)	10	0 (-3 - 2)	0%
Kershaws Frozen Foods Ltd	8	0 (-1 - 1)	0%
Young's Seafood Ltd	7	0 (-4 - 2)	0%
General Mills	7	-2 (-2 - 0)	0%
Jamie Oliver	6	1 (0 - 3)	0%
Weight Watchers	6	-2 (-4 - -1)	0%
Bakkavor	5	1 (-1 - 3)	0%

*Only companies with 5 or more products included

Of the ready meal subcategories that appeared most frequently on shelves, macaroni cheese had the highest proportion classified as HFSS (33%), followed by Carbonara (12%) and Tikka Curry (6%) (Annex 2). Vegetarian ready meals had the highest proportion of products deemed HFSS (10%) (Annex 2).

2) Calorie Reduction Guidelines

One in five (20%) ready meals contained more than the maximum calorie reduction guideline, with retailers having marginally better compliance (81%) than manufacturers (77%). Of the companies with 5 or more products, Saputo Dairy UK had the greatest number of ready meals exceeding the maximum calorie guideline (78%) followed by Royal (67%), Bakkavor (60%) and General Mills (57%) (Table 8). Nine companies had 100% compliance to the calorie guidelines.

Table 8. Companies with ≥5% of ready meals exceeding the maximum calorie guideline

Company	No. of products	Proportion exceeding maximum calorie guideline
Saputo Dairy UK	9	78%
Bakkavor	5	60%
General Mills	7	57%
Royal	9	67%
Wasabi	23	48%
Charlie Bigham's	45	42%
Zizzi	8	38%
M&S	164	29%
Nomad Foods	12	25%
Tesco	190	24%
Morrisons	126	21%
Lidl	97	19%
Sainsbury's	194	18%
Aldi	63	17%
Waitrose	63	17%
Jamie Oliver	6	17%
Myprotein	31	16%
Harry's Country Kitchen	13	15%
Iceland	69	14%
Asda	123	13%
The Gym Kitchen	17	12%
Slimming World	35	9%
Co-op	59	5%

We cannot comment on compliance with the sales-weighted average due to limited data, however findings from the Government’s progress report [14] showed that complete main meals were the only food category that decreased in both volume (down 3%) and calories sold (down 2.3%) between 2017 and 2021.

3) Salt Targets

Nearly all ready meals included in this survey (96%) met the maximum 2024 salt reduction target, with retailers complying better than manufacturers (98% and 91% respectively). Of the companies with 5 or more products in their portfolio, Royal had the greatest number of ready meals exceeding the salt target (56%), followed by Kitchen Joy (33%) and Wasabi (30%) (Table 9).

Table 9. Companies with ≥5% of ready meals exceeding the maximum salt target

Company	Number of Products	Proportion of Products Exceeding Maximum Salt Target
Royal	9	56%
Kitchen Joy	6	33%
Wasabi	23	30%
Zizzi	8	25%
Strathmore Foods	7	14%
Iceland	69	13%
Kershaws Frozen Foods Ltd	8	13%
Saputo Dairy UK	9	11%
Harry's Country Kitchen	13	8%
Lidl	97	5%

Improving Nutritional Profile

The salt content of ready meals can be reduced through a number of different approaches, given their multiple components and ingredients that can be individually reformulated or adjusted to reduce salt, whilst still maintaining taste and consumer acceptance.

Gradual reductions in added salt

The simplest and most preferred approach to salt reduction is the gradual removal of salt added as an ingredient during the manufacturing process. By slowly decreasing the salt content over time, manufacturers can help consumers adapt their palates, bringing consumers along the journey, ensuring they do not notice a change in taste.



Recipe Modification to Limit High Salt Components



In any product development, recipes can be altered to reduce, or replace ingredients typically high in salt (e.g. cheese, processed meats and high salt sauces). Manufacturers can also use additional flavour enhancers to make foods more palatable, without the need for added salt, such as herbs and spices.

Reformulation of Ingredients and Use of Salt Replacers

Reformulating ingredients typically used in ready meals, such as marinades, meat products and sauces, or acquiring lower salt equivalents, can significantly reduce a product's overall salt content. Additionally, the use of low sodium salt replacers (LSSS) such as potassium chloride, magnesium chloride, low-salt soy sauce or reduced sodium sea salt, can help reduce sodium content without sacrificing flavour.

An investigation of the declared ingredients within this dataset found just 45 (3%) ready meals used LSSS. Those that did use LSSS had on average 8% less salt (0.51g vs 0.55g per 100g) compared to those that did not. As a result, a smaller proportion of ready meals containing LSSS were high in salt compared to meals without (33% vs 56%, respectively), and these meals also showed improved nutritional profiles, with none classified as HFSS compared to 4% of those without LSSS.

While the uptake of salt replacers in the ready meal category appears to be low, their demonstrated impact on overall salt content warrants further investigation by the food industry.

Table 10. Companies providing low sodium salt replacers:

Company Name	Description	Salt Reduction
The Kerry Group	A sodium free ingredient made from botanical extracts, peptides and ferments.	Can reduce salt by up to 60%. It examines all three stages of taste - initial, middle, and aftertaste - to ensure a well-balanced flavour while simultaneously reducing sodium content
LoSalt KlingeFoods Ltd.	A blend of sodium chloride and potassium chloride. Is UK made, and suitable for use in organic systems.	Up to 66% sodium reduction (various blends available). Can be used as a 1:1 replacement.
Merisal Lower Sodium Sea Salt .	A lower sodium sea salt which is harvested from ocean sea water and combined with potassium chloride.	Offer 4 blends of reduced sodium salt: 25%, 35%, 45%, and 57%.
Saltsmith: Low Sodium Salt	A blend of sodium chloride and potassium chloride.	Offer 3 blends: 20%, 30% and 40% reduced in sodium as well as offering a blending service to produce bespoke salt blends.
Saltwell	A sea salt with naturally lower levels of sodium, and 15% potassium. Unlike other manufacturers, potassium and sodium are both present within the same grain.	35% reduced in sodium. Have different types of reduced sodium salt depending on the application. For example, they have a microfine salt which is good for snacks.
Smart Salt	A blend of sodium, potassium and magnesium chloride.	Can reduce sodium by 60%. Can be used in a 1:1 replacement. Replacement of sodium with magnesium has shown to have no bitter aftertaste.
SOLO Sea Salt	A reduced sodium salt with additional magnesium and potassium.	Offer 2 blends: 60% and 30% sodium reduction. Is 100% natural as there is no chemical processing.

Portion Control

Standardising portion sizes and ensuring they align with dietary guidance can support more consistent calorie and salt reduction across the category. Reformulating larger meals to contain proportionately less salt, or offering smaller portion sizes, may help reduce excess salt intake while promoting better portion awareness among consumers.

Increasing Vegetable Content

Our report highlighted insufficient fibre content in many ready meals, with 71% considered low in fibre. One solution to this would be incorporating more vegetables and legumes into ready meals. Vegetables and legumes are naturally rich in fibre and also low in salt, helping to improve the nutritional profile of a meal and reduce the overall calorie and salt content. The inclusion of vegetables and legumes can also replace other ingredients typically higher in salt, such as processed meat. This strategy also supports broader dietary guidance to increase fruit and vegetable consumption, which has been consistently challenging to achieve for much of the nation, particularly marginalised groups.



Case Study: Nomad Foods: Birds Eye SteamFresh Meals



Nomad Foods

Last year, Nomad Foods launched a new range of next generation healthy, veg-rich frozen prepared meals under their Birds Eye Steamfresh sub-brand of veg and veg-based products. The range, developed by Birds Eye Veg Experts:

- Is 100% non-HFSS
- Is 100% compliant with maximum UK salt targets
- Is 100% compliant with calorie reduction guidelines
- Delivers 1 or 2 of a consumer's 5-a-Day in each portion
- Provides 6.4 - 9.6g fibre per portion

The launch of these new meals was supported by media and shopper marketing campaigns, supporting Birds Eye's ambition to put advertising spend behind non-HFSS products and specifically Veg to drive consumption. Across their first 9 months on the market alone, these new Steamfresh meals added more than 3.5 million additional portions of veg onto the nation's plates.

Industry Comments

Charlie Bighams

Patrick Cairns, CEO of Charlie Bigham's said: "At Charlie Bigham's, flavour always comes first. We make food which is as tasty as possible, listening carefully to consumer feedback on the taste of dishes to make sure they reflect consumer palette. At Charlie Bigham's we have been slowly reducing the amount of salt we put in our food and will continue to do so.

Annex 1.

Methodology

Data Collection

Data for the full nutrition, ingredients, product weight, serving size and price for ready meals was collected from eleven major retailers (Aldi, Asda, Iceland, Lidl, Marks & Spencer, Morrisons, Ocado, Sainsbury's, Tesco, The Co-operative and Waitrose) following strict inclusion and exclusion criteria.

In January 2025, all eleven retailers were contacted and offered the opportunity to provide us with the nutritional information for their own brand of ready meals. Asda, Lidl and Waitrose provided us with their product portfolio, whilst we collected the remaining nutrition and ingredients information (both retailer and manufacturer) from Aldi, Iceland, Marks & Spencer, Morrisons, Ocado, Sainsbury's, Tesco and The Co-operative. Manufacturer products were also collected online from the retailers that provided us with their own brand products.

All companies (retailer and manufacturer) with 5 or more products were contacted and given the opportunity for data verification, including front of pack traffic light labelling and compliance with reformulation targets (calories and salt) and NPM score.

Please note, only products available for purchase in large supermarket chains in England were included in this report, and may not reflect a business's total portfolio.

Table 1a. Inclusion and Exclusion Criteria

Inclusion Criteria

- Complete ready meals (ie with accompaniment) in the chilled section of the supermarket
- Complete ready meals (ie with accompaniment) in the frozen section of the supermarket
- All cuisines (including, but not limited to, Thai, Italian, Chinese)
- All own-brand and branded meals, including out of home or celebrity chef meals
- Single serve ready meals, or larger meals with multiple portion sizes, but where portion size is greater than 200g
- Duplicates of products in different package sizes where the nutritional's are different

Exclusion Criteria

- Starters, side dishes and desserts that can be consumed with a meal
- Incomplete meals and meal centres (ie a curry that requires rice to be bought separately)
- Any items located in the 'lunch to go' aisle
- Sandwiches or salads
- Ambient ready meals
- Pizza
- Pastry Pies, Quiches, Pastries, Burgers
- Children's ready meals
- Soup
- Pre-filled, ready to cook pasta (fresh / dry)
- Duplicates of products in different package sizes where the nutritional's are the same
- Ready meal sharing bags i.e with multiple dishes
- Meal Kits that require ingredients to be put together to cook
- Ready meals with a pack size less than 400g that serves more than one person

Data Analysis

The nutritional content per 100g and per portion of each product was analysed against several government initiatives to encourage industry reformulation.

Products were sub-categorised based on main protein element (red meat, poultry, mixed, fish, vegetarian and vegan) and cuisine (75 in total) to make like-for-like comparisons of the variation of nutrition content.

1. Front of Pack Nutrition Labelling

The UK's voluntary front of pack colour coded nutrition labelling policy is aimed at helping consumers make healthier food and drink choices quickly and easily. The labelling system combines traffic light colour-coding with numerical information about energy, fat, saturated fat, sugars and salt content per 100g, with additional portion thresholds, to signify if a product is high, medium or low in a particular nutrient. Fat, saturated fat and salt content were compared to the colour-coded labelling criteria (Table 2a).

Table 2a. Colour coding criteria for 100g of food and portion cut offs

Text	LOW	MEDIUM	HIGH	
Colour Code	Green	Amber	Red	
			>25% of RIs	>30% of RIs
Fat	≤ 3.0g/100g	> 3.0g to ≤ 17.5g/100g	> 17.5g/100g	> 21g/portion
Saturates	≤ 1.5g/100g	> 1.5g to ≤ 5.0g/100g	> 5.0g/100g	> 6.0g/portion
(Total) Sugars	≤ 5.0g/100g	> 5.0g to ≤ 22.5g /100g	> 22.5g/100g	> 27g/portion
Salt	≤ 0.3g/100g	> 0.3g to ≤ 1.5g/100g	>1.5g/100g	>1.8g/portion

Fibre does not have a defined 'high', 'medium' or 'low' criteria for front of pack labelling, however according to UK legislation, a product can be deemed 'high in fibre' if it contains at least 6g per 100g or 3g per 100kcal, or a 'source of fibre' if it contains at least 3g per 100g or 1.5g per 100kcal [13]. Therefore, it is reasonable to assume a product containing less than 3g fibre per 100g or less than 1.5g per 100kcal is low in fibre.

2. Nutrient Profiling Model

The UK Nutrient Profiling Model (NPM) was developed by the Food Standards Agency in 2004 to assess the nutritional quality of food and drink, primarily for regulating advertising to children [15]. The model assigns a score based on the balance of positive nutrients (fruit, vegetables, nuts, fibre, and protein) and negative nutrients (energy, saturated fat, sugars and salt). Any food product with a score of 4 or more is deemed a less healthy, high fat, salt and/or sugar (HFSS) product. Individual NPM scores were calculated for each product. Where fibre was not declared on pack, fibre content per 100g was estimated using a category average. Fruit, vegetable and nut content was calculated based on information declared in the ingredients list. The average NPM score and proportion of products classified as HFSS were then assessed at the company level (retailer, manufacturer, and individual company).

3. Calorie Reduction Targets

The UK calorie reduction targets, introduced by Public Health England (PHE) in 2020, aim to reduce excess calorie consumption and tackle obesity [16]. The voluntary targets focus on reducing calories by up to 20% across key food categories frequently consumed by the public, including ready meals. The initiative encourages food manufacturers, retailers, and the out-of-home sector to reformulate products, reduce portion sizes, and promote lower-calorie options. The deadline for achieving these voluntary targets has been extended to the end of 2025.

4. Salt Reduction Targets

The UK Government has a longstanding voluntary salt reduction programme in place, with salt targets for over 100 different categories of food, including ready meals, set for food businesses to work towards. The first set of targets was set in 2006, with a further 3 iterations published since, each designed to be progressively lower than its predecessor, to bring consumers' taste preference for salt down gradually. The latest set of targets was published in 2020 and was set to be achieved by the end of December 2024 [11].

Table 3a. Salt reduction targets for ready meals over time

Main Product Category	Sub-categories	Salt Target for 2024 (g/100g)	Salt Target for 2017 (g/100g)	Salt Target for 2010 (g/100g)
Ready Meals and Meal Centres	8.1 Ready Meals and Meal Centres	0.60g (average r)	0.63g (average r)	8.1 Chinese/ Thai/ Indian ready meals 0.8g (average)
		0.90gg (maximum)	0.95g (maximum)	8.3 Italian/ Traditional/ Other ready meals 0.6g (average)

Annex 2.

Table 4a. Average NPM score (range) for sub-categories, and proportion which are HFSS

Category	Number of products	Average NPM score	Proportion of products that are HFSS
Macaroni Cheese	63	4	33%
Carbonara	33	2	12%
Tikka Curry	63	-1	6%
Lasagne	113	1	5%
Cottage Pie	71	0	4%
Bolognese	48	-1	4%
Pasta Bake	75	-1	0%
Fish Pie	38	0	0%
Roast Dinner	38	-3	0%
Hot Pot	35	-1	0%
Chilli-Based Meal	33	-3	0%
Sweet and Sour	33	-1	0%

Table 5a. Average NPM score (range) for ready meals with different protein, and proportion which are HFSS (sorted highest to lowest proportion that is HFSS)

Category	Number of products	Average NPM score	Proportion of products that are HFSS
Vegetarian	172	1 (-6 - 12)	10%
Red Meat	589	0 (-8 - 12)	4%
Vegan	83	-1 (-8 - 12)	4%
Poultry	516	-1 (-6 - 11)	3%
Mixed	46	-1 (-6 - 4)	2%
Fish	105	0 (-6 - 4)	1%

About Action on Salt and Sugar

Action on Salt and Sugar is a non-profit organisation based at Queen Mary University of London, working to improve population health and food environments through impactful food and drink nutritional research. We inform policy, influence the food industry, raise awareness, and build advocacy for salt and sugar reformulation.

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