## Vegetarian meat substitutes

Products available in supermarkets on the island of Ireland and consumer behaviours and perceptions





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### **Foreword**

Foods such as meat, poultry, fish, eggs, beans, peas, lentils and nuts play a very important role in the diet by providing protein. There has been a growth in the market of vegetarian, plant-based meat substitutes in recent years. *safe* ood undertook a survey of these products currently available in retail outlets on the island of Ireland. This snapshot survey provides detail on the nutritional profile of the products surveyed and compares them with their meat equivalents. The report also provides data on consumer perceptions of these products.

### **Executive summary**

#### **Aims**

- To provide an overview of the different types and the nutritional content of vegetarian, plantbased meat substitutes available online from a range of supermarkets on the island of Ireland
- Investigate consumer perceptions of the nutritional content of vegetarian, plant-based meat substitutes, their reported purchase, motivations and consumption of these products

#### **Methods**

The report presents findings from an online audit of ready-to-eat/cook vegetarian main meal vegetarian, plant-based meat substitutes available in supermarkets on the island of Ireland between 28 April and 26 May 2020. Consumers' behaviours and motivations for purchasing vegetarian, plant-based meat substitutes were determined via the *safe*food safetrak survey of 802 consumers (500 ROI and 302 NI) between mid-November 2020 and mid-December 2020.

#### **Key findings**

#### What type of vegetarian, plant-based meat substitutes are available?

The audit identified 354 products in:

- Meat-style meat-substitute burgers (n=28)
- Bean/vegetable-style meat-substitute burgers (n=36)
- O Meat-substitute steaks, mince, meatballs and Bolognese (n=31)
- Chicken substitutes e.g. nuggets, southern fried, goujons, escalopes, chicken-style (excluding burgers) (n=67)
- Sausage substitutes (n=44)
- Fish substitutes (n=9)
- Meat substitute ham, bacon & deli slices (n=14)
- Pastry-based meat substitutes including sausage rolls & pies (n=42)
- Miscellaneous meat style substitutes e.g. kebab, melts, duck (n=20)
- Miscellaneous vegetarian substitutes e.g. spinach bites, cheese grills/melts, veg fingers (n=34)
- Falafel and other lentil/pulse/nut based meat substitutes (n=29)
- The products included burgers, steaks, mince, meatballs, Bolognese, nuggets, fillets, goujons, escalopes, schnitzels, kievs, sausages, sausage rolls, pasties, pies, spring rolls, fish

fingers/fillets/cakes, ham, bacon, pudding, kebabs, pulled pork, and duck. Also included were falafels and other bean/pulse based products, and vegetarian products such as cheese grills and melts.

- The product labels bear marketing terms such as vegan; plant power; and 100% plant based.
- The products contain proteins from a number of ingredient sources including:
  - Mycoprotein™-protein derived from fungi, especially as produced for human consumption
  - soya protein (rehydrated/reconstituted/dried/textured/concentrate/isolate/structure)
  - o pea protein (textured concentrate/rehydrated/ textured/isolate/pea flour)
  - wheat protein (hydrated/rehydrated/textured/gluten)
  - beans (black beans, soya beans, edamame soya beans, red kidney beans, haricot beans), peas (chickpeas, yellow split peas), lentils
  - mixed nuts
  - o cheese (goat's milk/cow's milk),
  - o chestnut mushrooms, mushrooms
  - o tempeh, quinoa
  - o tofu

#### What is the nutritional profile of the products surveyed?

- The products surveyed are highly processed and contain multiple ingredients, including ingredients added for flavour and texture.
- The protein content of the products surveyed ranged from 0.9 to 30.6 g per 100g (average 10.7g per 100g). Almost 1 in 4 (23%, n=84) of the products sampled were a source of protein (where the percentage of energy from protein ranged from 12-19.9%) while 49% (173 products) were high in protein (where the percentage of energy from protein is 20% or more). This means that one quarter (28%) of the products surveyed are not a source of or high in protein and consumers need to be aware of this if relying on these foods as a protein source.
- The protein content varied both within each category and across the categories sampled. Half of the products (50%, n=178) made a protein-related claim, 39 products (11%) made a claim that they are a source of protein and 139 products (39%) bear a claim that they are high in protein.
- When the products are profiled according to front of pack traffic light labelling, they tend to be low in sugar and saturated fat, and medium for salt and total fat.

- The majority (80%) of the products are a source of fibre, which means they contain at least 3g of fibre per 100g. This is because these products have added carbohydrates unlike their equivalents meat products, which do not contain fibre in their natural form.
- 27 out of 354 products provide data on micronutrients, iron was the most commonly listed micronutrient (on 6% of products) followed by B12 (on 4% of products).

#### How do the vegetarian plant-based meat substitutes compare with their meat equivalents?

- A comparison of the range of plant-based meat substitutes surveyed illustrates that they are different from their meat equivalents.
- Most plant-based meat substitutes are lower in energy, total and saturated fat than their meat equivalents.
- Plant-based meat substitutes are usually a source of fibre and carbohydrates while their meat equivalents are generally not (exceptions being chicken in breadcrumbs/cod in breadcrumbs and sausage rolls, which contain added carbohydrates).
- Plant-based meat substitutes tend to have less protein than their meat equivalents but this varies depending on the category of substitutes.
- Salt levels tend to be either similar or higher in plant-based meat substitutes than in meat equivalents.
- Micronutrients cannot be compared due to the lack of data.

#### Findings from consumer survey on vegetarian meat substitutes?

- One third of consumers reported eating meat substitutes such as vegan or vegetarian versions of burgers, sausages, chicken or fish.
- The most popular meat substitutes that participants reported eating were meat-substitute burgers; mince, meatballs & Bolognese; and sausage substitutes including sausage rolls.
- For those consumers who report eating plant-based meat substitutes, 48% of consumer on the island of Ireland eat them once a week or more.
- Of those consumers who report eating these products, one third reported that they select
  these products because of health/better for you, 21% because of taste and 15% because of
  environment/climate change.

#### What is the guidance for consumers?

- The plant-based meat-substitutes surveyed range in nutritional quality so consumers are advised to read labels and look for products containing sources of protein when possible.
- A quarter of the products sampled were neither a source of protein nor high in protein.

- If the percentage of energy that comes from protein is between 12 and 19.9% the product can claim to be a source of protein
- If the percentage of energy that comes from protein is 20% or greater the product can claim to be high in protein
- Plant-based meat-substitutes contain more carbohydrates than meat and less calories and so
  may call for adjustments when using these products to directly replace meat due to their
  differing nutritional profile.
- The plant-based meat-substitutes surveyed contained a number of ingredients and were processed in nature.
- There are a variety of dietary sources of protein that you can choose from including meat, poultry, eggs, fish, beans, peas, lentils, nuts, seeds and tofu.
  - o In ROI, the Healthy Eating Guidelines¹ recommend that those aged 5 years and older eat 2 servings a day of protein foods such as meat, poultry, fish, eggs, beans and nuts. Choose lean meats and fish (up to 2 portions oily per week), and limit processed salty meats such as sausages, bacon and ham not every day. The guidelines recommend beans and eggs as good sources of protein that are low in fat and a good choice for meat-free days².
  - o The UK Eatwell guide³ recommends eating some beans, pulses, fish, eggs, meat and other proteins (including 2 portions of fish every week, one of which should be oily). It states that these foods are sources of protein, vitamins, and minerals. The guide advises that if you eat more than 90g of red or processed meat per day, try to cut down to no more than 70g per day. The term processed meat includes sausages, bacon, cured meats and reformed meat products. It also mentions tofu, bean curd and Mycoprotein™ as vegetable sources of protein. The guide notes that pulses, such as beans, peas and lentils, are good alternatives to meat because they're lower in fat and higher in fibre and protein, too.

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/ /742750/Eatwell\_Guide\_booklet\_2018v4.pdf

<sup>&</sup>lt;sup>1</sup> https://www.gov.ie/en/publication/70a2e4-the-food-pyramid/

<sup>&</sup>lt;sup>2</sup> https://assets.gov.ie/7579/b44458be78574701a5e674cdb1d826ff.pdf

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• Consult a trusted source of information if you are seeking guidance on eating a balanced diet as a vegetarian, for example *safe*food <a href="https://www.safefood.net/how-to/vegetarian-diet">https://www.safefood.net/how-to/vegetarian-diet</a>

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## 1 Introduction

#### What are vegetarian, plant-based meat substitutes?

These products are generally processed convenience foods that are rich in protein and prepared to resemble meat in texture and appearances. Some definitions include:

- Meat analogues, or plant-based products are products that simulate the properties of traditional meat products (1)
- Meat analogue is the food which is structurally similar to meat but differs in composition.
   Meat analogue, also called a meat substitute, mock meat, faux meat, or imitation meat (2), approximates the aesthetic qualities (primarily texture, flavour, and appearance) and/or chemical characteristics of specific types of meat. It may also refer to a meat-based, healthier, and/or less-expensive alternative to a particular meat product, such as surimi.
   Generally, meat analogue is understood to mean a food made from non-meat ingredients, sometimes without dairy products (3).

A 2019 audit of plant-based meat substitutes in Sydney, Australia describes how "Meat substitutes such as tofu and textured soy protein products have existed in the Western world since at least the 1960s, however it now appears that the target has moved from niche, to more mainstream, with products designed specifically to appeal to meat-eaters (4). Products resembling burger patties, mince, sausages, and chicken are displayed alongside meat in the chilled cabinets and many mimic meat products directly, with 'bleeding' burgers and other products designed to exhibit 'meaty' characteristics. Since 2015, launches of plant-based meat substitutes that mimic the taste, texture, and appearance of animal-based products have exceeded 4400 products worldwide."

#### Plant-based meat substitutes and healthy eating

Plant-based meat substitutes are generally positioned as protein-rich foods, which belong to the meat, poultry, fish, eggs, beans and nuts food group in the Healthy Eating Guidelines in ROI (5) and to the beans, pulses, fish, eggs, meat and other protein in the Eatwell guide in the UK (6). This food

group is the most important food group for providing protein<sup>4</sup> and iron and Vitamin B12. Foods in this group are not a source of carbohydrate and dietary guidelines recommend selecting options that are lower in fat and salt:

- In ROI, the Healthy Eating Guidelines<sup>5</sup> recommend that those aged 5 years and older get 2 servings a day of protein foods such as meat, poultry, fish, eggs, beans and nuts (5). It suggests choosing lean meats and fish (up to 2 portions oily per week), and limiting processed salty meats such as sausages, bacon and ham. The guidelines also recommends beans and eggs as good sources of protein that are low in fat and a good choice for meat-free days<sup>6</sup>.
- The UK Eatwell guide<sup>7</sup> recommends eating some beans, pulses, fish, eggs, meat and other proteins (including 2 portions of fish every week, one of which should be oily)(6). It states that these foods are sources of protein, vitamins, and minerals. The guide advises that if you eat more than 90g of red or processed meat per day, try to cut down to no more than 70g per day. It also explicitly mentions tofu, bean curd and Mycoprotein™ as vegetable sources of protein. The Eatwell guide notes that pulses, such as beans, peas and lentils, are good alternatives to meat because they're lower in fat and higher in fibre and protein, too.

The most recent dietary data relating to meat consumption on the island of Ireland shows that:

- In ROI (7), meat (including meat products and dishes) was consumed by 98% of the population. The average intake of fresh meat among consumers was similar for both 18-64 year olds (71g) and those aged 65 years and over (67g). Bacon and ham are the most commonly consumed meats (73%) followed by poultry (57%).
- In Northern Ireland (8), the mean consumption of red and processed meat for women aged 19 to 64 years (57g) met the current recommendation that adult average intakes should not

<sup>&</sup>lt;sup>4</sup> The daily Reference Intake for protein is 50g for an adult (see Annex XIII of https://www.fsai.ie/uploadedFiles/Consol\_Reg1169\_2011.pdf)

<sup>&</sup>lt;sup>5</sup> https://www.gov.ie/en/publication/70a2e4-the-food-pyramid/

<sup>&</sup>lt;sup>6</sup> https://assets.gov.ie/7579/b44458be78574701a5e674cdb1d826ff.pdf

<sup>&</sup>lt;sup>7</sup>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/742750/Eatwell\_Guide\_booklet\_2018v4.pdf

exceed 70g per day. However, mean consumption for men aged 19 to 64 years (89g) exceeded the recommendation.

In addition to the public health dietary guidelines on the island of Ireland, the World Health Organisation and World Cancer Research Federation have issued recommendations to limit the consumption of red and processed meats (9). Experts from the International Agency of Research on Cancer, which is part of the World Health Organisation, concluded eating 50g of processed meat daily increases the risk of colorectal cancer by 18 per cent. The World Cancer Research Federation<sup>8</sup> recommends that consumption of red meat should be limited to no more than about three portions per week. Three portions is equivalent to about 350–500g (about 12–180z) cooked weight. In relation to processed meats, the World Cancer Research Federation recommends that very little, if any at all, is consumed (9).

#### The market for plant-based meat-substitutes

A Mintel report (10) indicates that the number of consumers in the UK who report having eaten meat-free foods including meat substitutes, or dishes made using meat substitutes, including ready meals, sausages, burgers, deli ingredients (e.g. vegetarian mince), pastry products and snacks, has increased from 50% of the population in 2017 to 65% of the population in 2019. The report notes that the sales of meat-free foods in the UK grew 40% from £582 million in 2014 to an estimated £816 million in 2019 with an expectation that sales will be in excess of £1.1 billion by 2024 (10).

From an ROI perspective, a Bord Bia article<sup>9</sup> from October 2019 (11) notes that vegan is the third fastest growing on-pack claim for food and drink launches globally over the last five years. A recent press release by the Food Safety Authority of Ireland<sup>10</sup> (12) noted that "once considered niche, vegan products in recent years have seen an increasing trend in people moving towards plant-based diets, including those who describe themselves as 'dietary vegans' (those who are vegan for food consumption only). The release also notes that there has also been a noticeable increase in foods sold that are marketed as vegan, to cater for the rising demand."

<sup>&</sup>lt;sup>8</sup> www.wcrf.org/dietandcancer/recommendations/limit-red-processed-meat

<sup>&</sup>lt;sup>9</sup> www.bordbia.ie/industry/news/food-alerts/lunch-insights-from-the-2019-contemporary-food--to-go-show/

www.fsai.ie/news\_centre/press\_releases/allergen\_warning\_vegan\_28092020.html

#### Consumer behaviours regarding plant-based meat substitutes

According to a press release from Mintel<sup>11</sup> (10), the proportion of meat eaters in the United Kingdom who have reduced or limited the amount of meat they consume has risen from 28% to 39% between 2017 and 2019. Women (42%) are more likely than men (36%) to have limited/reduced the amount of meat in their diets; this rises to 45% among all those under 45 years old. The release also notes that 38% of those who do not use meat substitutes would prefer to substitute meat with other ingredients such as cheese or pulses, rather than buy meat substitutes (10). A study from the Netherlands (13) found that the most common foods chosen to substitute for meat (in ascending order) were fish and eggs, followed by cheese, with plant-based meat substitutes ranked further down the list.

In 2018, 4.3% (n=153,569) of adults in ROI described themselves as vegetarians (meaning they do not consume meat products, but they can still consume other ingredients derived from animals, like egg and dairy products) while 4.1% (n=146,426) of adults considered themselves as dietary vegans (those who are vegan for food consumption only) (14). The most recent data from NI (data from the National Diet and Nutrition Survey 2008-2012) (15) shows that 1% of adults report following a vegetarian diet.

#### Nutritional profile of plant-based meat substitutes

There is little published data on the nutritional profile of the types of products that have been marketed in recent times. An audit of plant-based meat products in Australia (4) found that plant-based options were generally lower in kilojoules, total and saturated fat, and higher in carbohydrate, sugars, and dietary fibre compared with meat equivalents. Only 4% of products were low in sodium and less than a quarter of products (24%) were fortified with vitamin B12, 20% with iron, and 18% with zinc. The protein content of the products surveyed had a great range (0.3-36.1g per 100g). The protein content of the plant-based burger and plant-based mince was significantly less that their meat equivalents but there was no significant difference between the protein content of the plant-based sausages and that of their meat-equivalents. An investigation of modern meat analogues in USA and Canada found that firstly, the ingredients used in the formulation of modern meat analogue products make these products fit under the classification of ultra-processed foods; and secondly, the nutrient specifications of popular meat analogue products can effectively simulate the nutrient specifications of the meat products they are attempting to simulate (1). Fresán and colleagues reviewed the nutritional profile of 56 meat analogues and reported that there were no major nutritional differences among meat analogues which differ in their main source of protein (16).

<sup>-</sup>

 $<sup>\</sup>frac{11}{www.mintel.com/press-centre/food-and-drink/plant-based-push-uk-sales-of-meat-free-foods-shoot-up-40-between-2014-19}$ 

### Consideration of plant-based meat substitutes in the context of sustainable and healthy diets

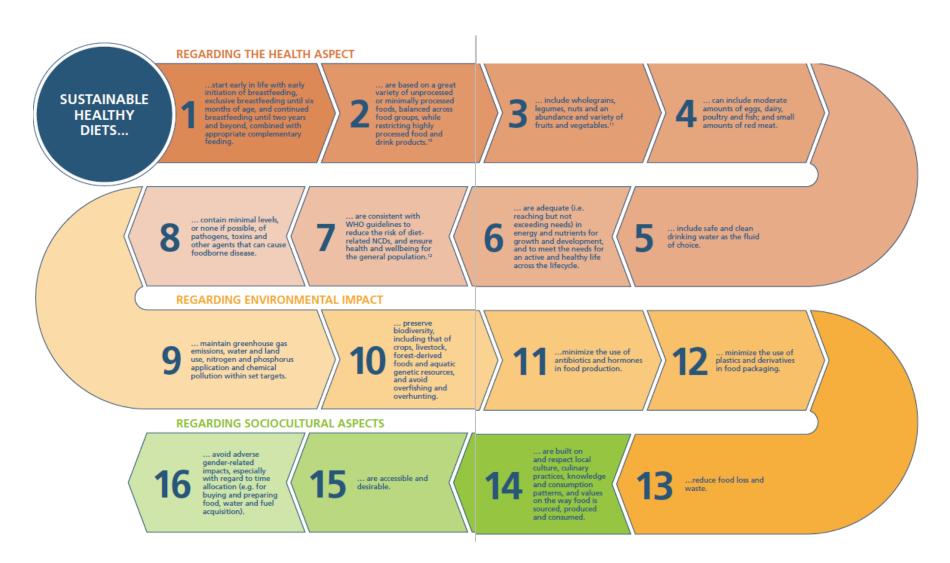
The WHO/FAO guiding principles for sustainable healthy diets reference health, environmental and socio-cultural aspects (Figure 1) and a number of these principles are relevant in the context of selecting protein sources including:

- sustainable healthy diet are based on a variety of unprocessed or minimally processed foods balanced across food groups while restricting highly processed food and drink products
- sustainable healthy diets including wholegrains, legumes and nuts and an abundance and variety of fruits and vegetables
- sustainable healthy diets can include moderate amounts of eggs, dairy, poultry and fish and small amounts of red meat

These guiding principles also reference environmental aspects that relate to protein sources including greenhouse gas emissions, water and land use and biodiversity (but there is no information on these aspects on the product label in the supermarket). The guiding principles also reference the need to take cultural dietary patterns into account in order to achieve and a healthy diet is accessible and desirable.

Studies of food and health relationships have consistently highlighted associations between low intakes of plant-based foods and high intakes of animal products and ultra-processed foods with poor health outcomes. These findings point to plant- versus animal-based diets and degree of food processing as priority characteristics for analysing dietary patterns in the context of sustainability considerations (17).

Figure 1 WHO/FAO Guiding Principles for Sustainable Healthy Diets



## 2 Aims and objectives

#### **Aims**

- To provide an overview of the different types and the nutritional content of plant-based meat substitutes available online from a range of supermarkets on the island of Ireland.
- Investigate consumer consumption patterns and motivations for choosing ready-to-eat/cook vegetarian main meal options.

#### **Objectives**

- Conduct an audit of vegetarian and vegan main meal ready-to-cook/eat options available online from the major supermarkets on the island of Ireland
- Identify the ingredients and nutritional content per serving (and 100g) of these products specifically protein (g), calorie (kcal), total fat (g), saturated fat (g), salt (g) and sugar (g) and any micronutrient data provided.
- Describe the products using the Front of Pack labelling criteria
- Review protein claims on the products
- Compare the nutritional content of different types of products to their equivalent meatbased product (per 100g)
- Conduct a survey of consumer to assess their consumption patterns and motivations for choosing ready-to-eat/cook vegetarian main meal options.

# 3 Methodology

#### **Online audit**

#### **Supermarket selection**

Supermarkets included in the audit were selected based on market share data (Kantar database accessed on x date). In the context of the COVID pandemic only supermarkets with an online food shopping service could be selected for the purpose of the audit. The supermarkets selected were:

- ROI Tesco and SuperValu (Dunnes, Aldi, Lidl and convenience stores were excluded, as they
  do not offer online shopping)
- NI Tesco, Sainsbury's and Asda (the websites used for all three NI supermarkets were the UK website as there is no separate website for NI)

#### **Search process**

A search of the selected supermarket websites for plant-based meat-substitutes was made using key words - 'meat alternatives', 'meat substitutes', 'meat-free', 'meat free', 'plant-based', 'vegan', and 'vegetarian' - to ensure all available products were captured. Where the product was available on more than one supermarket, the first supermarket listing the product was noted as the source of the product. The audit was carried out between 28 April-26 May 2020.

#### Inclusion/exclusion criteria

Products were included if they were:

- a direct alternative to meat in a meal e.g. Quorn™ products, meat-free burgers, fishless fillets, meat-free steak pies. Other vegetarian/vegan main meal options etc. that are marketed as alternatives to meat in meals were also included
- 'ready to cook' with little preparation involved, e.g. inclusion of falafels or lentil ragu but not of dried or tinned lentils.

#### Products were excluded if they were:

raw ingredients often found in meat substitues such as dried lentils or jackfruit in water.
 Composite meals containing carbohydrates such as rice or potato, which would have skewed nutrition results.

#### **Data collection**

Screenshots of the plant-based meat substitutes identified from the audit were taken to capture the data relevant to the audit including:

- product description
- product weight
- portion size
- nutrition information protein, energy, fat, saturated fat, carbohydrates, sugar, salt, fibre, and any micronutrients referenced
- nutrition and health claims if present
- ingredients
- cost

#### **Categorisation**

The products were categorised based on the product description e.g. 'burger', 'mince', 'sausage' etc. Miscellaneous products were categorised based on main component of foods e.g. if they were bean and lentil products e.g. falafels or included pastry e.g. pasties and pies. The twelve categories were:

- 1. meat-style meat substitute burgers
- 2. bean/vegetable-style meat substitute burgers
- 3. meat substitute steaks, mince, meatballs & Bolognese
- 4. chicken substitutes e.g. nuggets, southern fried, goujons, escalope's, chicken-style (excluding burgers)
- 5. sausage substitutes
- 6. fish substitutes
- 7. meat substitute ham, bacon & deli slices
- 8. pastry-based meat substitutes including sausage rolls & pies
- 9. miscellaneous meat style substitutes e.g. kebab, melts, duck
- 10. miscellaneous vegetarian substitutes e.g. spinach bites, cheese grills/melts, veg fingers
- 11. falafel and other lentil/pulse/nut based meat substitutes.

#### **Data analysis**

Excel was used for statistical analysis of the data. Front of pack traffic light labelling (Table 1) was used to classify products as low, medium or high in total fat, saturated fat, sugars, and salt (18).

Table 1 Criteria for determining red, amber and green colour coding per 100g of food for front of pack nutrition label

Text	LOW	MEDIUM	HIGH		
Colour code	Green	Amber	Red		
Fat	≤ 3.0g/100g	> 3.0g to ≤ 17.5g/100g	> 17.5g/100g > 21g/port		
Saturates	≤ 1.5g/100g	> 1.5g to ≤ 5.0g/100g	> 5.0g/100g	> 6.0g/portion	
(Total) Sugars	≤ 5.0g/100g	> 5.0g and ≤ 22.5g /100g	> 22.5g/100g	> 27g/portion	
Salt	≤ 0.3g/100g > 0.3 1.5g		>1.5g/100g	>1.8g/portion	

The EU criteria for nutrition labelling was used to categorise products as sources of or high in fibre and protein (European Commission Regulation EC 1924/2006).

#### Comparison of products with meat equivalents

Nutritics was used to access the nutritional composition of meats. The code GB15, which refers to the McCance & Widdowsons 7th edition food composition data, were the standard used. The meat-substitutes were categorised and their meat equivalents were searched for on Nutritics, which provided an average nutritional profile. Screenshots of the relevant Nutritics items identified were taken to capture the data relevant to the comparison. The format of the meat equivalent selected was chosen to reflect the format of the plant-based meat substitutes in terms of cooking and preparation required.

#### **Consumer survey**

Consumers' behaviours and motivations for purchasing plant-based meat-substitutes were determined via the *safe*food safetrak consumer survey. Due to restrictions in place to prevent the spread of COVID-19, the 2020 safetrak research was undertaken using a telephone methodology. The total number of interviews achieved was 802 (500 ROI and 302 NI) and fieldwork was conducted between mid-November 2020 and mid-December 2020. Data was weighted to Census estimates at the analysis stage. The questions addressed frequency and types of meat substitutes eaten and the motivations for doing so.

# 4 Results

#### What type of plant-based meat substitutes were found during the audit?

A total of 354 plant-based meat-substitutes were identified from the online audit of supermarkets in the UK and ROI conducted. The products were divided into 11 categories:

- Meat-style meat substitute burgers (n=28). This category included meat substitutes such as 'Meat Free Meat Style Burgers', 'Meat Free Beef Style Burgers', 'Chicken Style Burgers' and 'Vegetarian Pulled Pork 1/4 LB Burgers'.
- 2. Bean/vegetable-style meat substitute burgers (n=36). This category included meat substitutes such as 'Smoky 'Jack' Quarter Pounders', 'Sweet Potatoes & Blackbean Burgers', 'Kale and Quinoa Burgers', and 'Vegetable Quarter Pounders'.
- 3. Meat substitute steaks, mince, meatballs & Bolognese (n=31). This category included meat substitutes such as 'Meat Free Vegetarian Mince', 'Vegetarian Bolognese', 'Vegan Mushrooms Steaks', and 'Meat Free Swedish Style Balls'.
- 4. Chicken substitutes e.g. nuggets, southern fried, goujons, escalopes, chicken-style (excluding burgers) (n=67). This category included meat substitutes such as 'Crispy Nuggets', 'Meat Free Roast Style Sliced Fillets', 'Family Roast' and 'Sweet Chipotle Goujons'.
- 5. Sausage substitutes (n=44). This category included meat substitutes such as 'Meat Free Sausages', 'Super Green Sausages', 'Pea Based Smoked Sausage', and 'Chorizo Style Bangers'.
- **6.** Fish substitutes (n=9). This category included meat substitutes such as 'Fish-Style Fillets', 'Vegan Fishless Fingers', and 'Vegetarian Fishcake'.
- 7. Meat substitute ham, bacon & deli slices (n=14). This category included meat substitutes such as 'Vegan Chicken Free Slices', 'Meat Free Bacon Slices', 'Spinach And Red Pepper Slices', and 'Vegetarian Pepperoni'.
- 8. Pastry-based meat substitutes including sausage rolls & pies (n=42). This category (n=42) included plant-based meat-substitutes such as 'Vegan Sausage Rolls', 'Cheese Leek & Red Onion Plaits', 'Mushroom & Chicken style pies' and 'Spicy 3 Bean Pasty'.
- 9. Miscellaneous meat style substitutes e.g. kebab, melts, duck (n=20). This category included meat substitutes such as 'Veggie Greek Kebab', 'Veggie pudding', 'Shredded Hoisin Duck', 'Sweet and Sour Porkless Bites', and 'Pan-Fry Protein Pieces'.
- 10. Miscellaneous vegetarian substitutes e.g. spinach bites, cheese grills/melts, veg fingers (n=34). This category included meat substitutes such as 'Vegetarian & Vegan Jackfruit Thai

- Red Curry', 'Vegetable Dippers', 'Meat Free Mushroom Risotto Bakes', 'Sweet Potato Pakora', and 'Vegetarian Cheese & Onion Crisp Bakes'.
- 11. Falafel and other lentil/pulse/nut based meat substitutes (n=29). This category included meat substitute products such as 'Mediterianean Falafel', 'Smokey Mexican Black Bean Chilli', 'Koftas', and 'Spicy Bean Bakes'.

#### **Product names and marketing terms**

The labels of the products surveyed contain information on the name of the product and a sample is included to illustrate the range of terms used to describe the products:

- Tempeh Spare Ribz Sticky BBQ Sauce
- Ultimate Burgers
- Quarter Pounders Free of Meat, Full of Taste
- Meat Free Burgers
- Vegetable Protein Balls
- Quorn™ Fillets Deliciously Versatile
- Southern Fried Poppers
- Marinated Chicken Style Pieces Kick of Tikka
- Plant Chicken Tenders
- Herby Bangers
- Plant-Based Hot Dogs
- Smoky Fajita Fillet Strips
- Tikka Deli Readybites
- Breaded Fillets Irrestibly tasty
- Vegan Roast Tendership
- Non-Meaty Sausages
- Plant Greek Kebab
- Sticky Smokehouse Oumph
- Vegetarian Shredded Hoisin Duck
- 100% Plant based Pan-Fry Protein Pieces
- Vegan Fishless Fingers
- Moroccan Vegbabs
- Crunchy Veg Burger
- Minced 100% Plant Based

Wicked Spiced Amazeballs

There are a number of instances where the product is described using the name of a meat which is presented along with a descriptor to denote that the product is manufactured with ingredients that do not include meat such as:

- Chicken Style Pieces
- Plant Chicken Tenders
- Vegan Fishless Fingers
- Vegetarian Shredded Hoisin Duck

There are also a number of instances where the product is described using a term that is typically associated with a meat product but again with reference to the product being plant based such as:

- Quarter Pounders Free of Meat
- Tempeh Spare Ribz
- Non-Meaty Sausages

The product labels also bear marketing terms such as vegan<sup>12</sup>; plant power; and 100% plant based.

The cost of each product in Euro (€) or pound Sterling (£) was recorded per pack and per 100g depending on which jurisdiction (ROI/NI) the supermarket was located. The cost of products per pack ranged from €1.80-6.50 and £1.00-5.00. The cost of the products per 100g ranged from €0.44-2.50 and £0.34-2.50. It is apparent from the audit that there is a wide range in cost per pack and per 100g in every product category.

#### Ingredients in plant-based meat substitutes

The products surveyed contain a number of ingredients as illustrated in Table 2 which details the list of ingredients for one product in each of the 11 categories. Table 3 provides an overview of the sources of protein, fat and carbohydrate in each of the product categories surveyed. The products include proteins from a number of plant sources including:

- Mycoprotein™-protein derived from fungi, especially as produced for human consumption
- soya protein (rehydrated/reconstituted/dried/textured/concentrate/isolate/structure)
- pea protein (textured concentrate/rehydrated/ textured/isolate/pea flour)

<sup>&</sup>lt;sup>12</sup> There is no legal definition of the term "vegan", "plant power" or "100% plant-based" in EU law.

- wheat protein (hydrated/rehydrated/textured/gluten)
- beans (black beans, soya beans, edamame soya beans, red kidney beans, haricot beans), peas (chickpeas, yellow split peas), lentils
- mixed nuts
- cheese (goat's milk/cow's milk),
- chestnut mushrooms, mushrooms
- tempeh, quinoa
- tofu

The carbohydrate source was generally not the main source of energy in the products unless in the case of products such as sweet potato pakora, where sweet potato was the main ingredient. The carbohydrate sources were often used as stabilisers, gelling agents and thickeners in the products. A common ingredient present was methyl cellulose which is a thickener and a source of fibre. Other commonly used carbohydrate ingredients that are high in fibre include barley malt and maize.

Table 2 Sample list of ingredients for a product from each of the 11 categories of products surveyed

Category	Product Name	Ingredient List			
Meat-style meat substitute burgers (category 1)	Linda McCartney Mozzarella Burgers	Rehydrated Textured Soya Protein (64%), Rapeseed Oil, Onion (8%), Mozzarella Cheese (Milk) (8%), Seasoning (Yeast Extract, Malted Barley Extract, Onion Powder, Flavouring, Salt, Garlic Powder), Stabiliser: Methyl Cellulose, Chickpea Flour, Flavouring (Yeast Extract, Salt, Sunflower Oil, Acid: Citric Acid), Garlic Purée, Malted Barley Extract, Onion Powder			
Bean/ vegetable-style meat substitute burgers (category 2)	Strong Roots Bulgarwheat Bean Beetroot Burger	Kidney Beans 28%, Water, Sunflower Oil, Potato Flakes, Cooked Bulgur (Gluten) 9%, Beetroot 8%, Carrot, Corn Starch, Bread Crumbs (Wheat Flour, Salt, Yeast), Mustard (Water, Mustard Seed, Vinegar, Sugar, Salt, Flavouring, Spices), Salt, Dried Vegetables (Onion, Tomato, Garlic), Herbs, Lemon Juice			

		Concentrate, Thickener: Hydroxypropyl Methyl Cellulose, Garlic Powder
Meat substitute steaks, mince, meatballs & Bolognese (category 3)	Quorn™ Meat Free Peppered Steaks 2 Pack	Mycoprotein™ (76%), Water, Natural Flavouring, Rehydrated Free Range Egg White, Vegetable Oils (Palm, Rapeseed, Sunflower), Dextrose, Gluten Free Roasted Barley Malt Extract, Firming Agents: Calcium Chloride, Calcium Acetate, Black Pepper, Green Pepper, Red Pepper, Salt
Chicken substitutes (category 4)	Vivera Veggie Chicken Pieces	Rehydrated Soya Protein* [93%], Onion Extract [3%], Natural Flavourings [Wheat], Pea Fibres, Salt, *This ingredient is not only from the Netherlands, but also from non-EU countries
Sausage substitutes (category 5)	Birds Eye Meat Free Sausages	Rehydrated Pea Protein (63%), Onion, Rapeseed Oil, Apple Fibre, Pea Flour, Stabiliser (Methylcellulose), Sunflower Oil, Pea Fibre, Salt, Potato Starch, Onion Powder, Sugar, Spices, Maltodextrin, Natural Flavouring, Barley Malt Extract, Mushroom Powder, Sage, Mushroom Extract
Fish substitutes (category 6)	Tesco Plant Chef Battered Fish Free Fillets	Water, Soya Protein Concentrate (13%), Wheat Protein, Pea Flour, Cornflour, Rice Flour, Sunflower Oil, Soya Protein Isolate (3%), Wheat, Tapioca Starch, Salt, Emulsifier (Guar Gum), Dextrose, Flavouring, Thickener (Methyl Cellulose), Sugar Cane, Dried Vegetables, Onion Powder, Vegetable Protein, Lemon Juice, White Pepper, Raising Agent (Sodium Carbonates), Iron, Vitamin B12.

Meat substitute ham, bacon & deli slices (category 7)	Tofurky Hickory Smoke Flavour Deli Slices	Water, Wheat Gluten, Tofu (Water, Soybeans, Firming Agents: [Magnesium Chloride; Calcium Chloride]) (15%), Soy Sauce (Water, Soybeans, Wheat, Salt), Rapeseed Oil, Flavourings, Sea Salt, Cornflour, Chickpea Flour, Haricot Bean Flour, Flavour Enhancer: (Potassium Chloride), Firming Agent: (Calcium Lactate), Onion, Carrot, Celery, Garlic, Leek, Antioxidant: (Extracts of Rosemary), Concentrated Lemon Juice, Smoke Flavouring
Pastry-based meat substitutes (category 8)	Quorn™ Vegetarian Steak Slice	Wheat Flour (contains added Calcium, Iron, Niacin, Thiamin), Water, Quorn™ Pieces (12%) (Mycoprotein™*, Rehydrated Free Range Egg White, Flavouring, Firming Agents: Calcium Chloride, Calcium Acetate; Roasted Barley Malt Extract), Onion (5%), Margarine [Vegetable Oils (Palm, Rapeseed), Water, Salt, Emulsifier: Mono- and Diglycerides of Fatty Acids], Peppered Seasoning Mix [Modified Maize Starch, Flavouring, Maltodextrin, Palm Fat, Spices, Barley Malt Extract, Mustard, Lactose (Milk), Salt, Milk Proteins], Double Cream (Milk), Free Range Egg, Salt, *11% of product
Miscellaneous meat style substitutes (category 9)	Oumph! Kebab Spiced	Water, Soya Protein Concentrate (20%), Sunflower Oil, Grape Sugar, Salt, Paprika, Coriander, Ginger, Cardamom, Oregano, Garlic, Cumin, Caraway, Black Pepper, Parsley, Fenugreek, Red Chilli
Miscellaneous vegetarian substitutes (category 10)	Plant Pioneers Mexican Style Jackfruit	Jackfruit (44%), Green Pepper, Water, Onion, Tomato Paste, Garlic, Sunflower Oil, Spirit Vinegar, Sugar, Coriander, Salt, Chilli Powder,

		Black Pepper, Oregano, Cayenne Pepper, Smoke Flavouring.
Falafel and other lentil/pulse/nut based meat substitutes (category 11)	Cauldron Middle Eastern Falafels	Chickpeas (58%), Onion (11%), Seasoning [Wheat Flour (Wheat Flour, Calcium Carbonate, Iron, Niacin & Thiamine), Salt, Sugar, Cumin (0.3%), Coriander (0.3%), Parsley, Black Pepper, Raising Agent: Sodium Bicarbonate], Vegetable Oils (Sunflower, Rapeseed), Breadcrumb [Wheat Flour (Wheat Flour, Calcium Carbonate, Iron, Niacin & Thiamine), Salt, Yeast], Parsley, Coriander (0.8%), Garlic Purée

Table 3 Main protein, fat and carbohydrate sources for each of the 11 categories surveyed

Category	Protein sources	Fat sources	Carbohydrate sources
Meat-style meat substitute burgers (category 1)	wheat protein (hydrated/textured), Mycoprotein™, soya protein (rehydrated textured), soy structure, pea protein (textured)	coconut, sunflower, rapeseed, soybean oil, vegetable oil	methyl cellulose, malted barley, wheat starch, chicory root fibre, wholegrain oat flour
Bean/ vegetable-style meat substitute burgers (category 2)	Many products did not list a source of protein. Mushrooms, sweet potato, beans, chickpeas, quinoa and mixed vegetables were commonly listed as main ingredients for these products.	peanut paste; sunflower, rapeseed or palm oil	bulgur, corn starch, rice, sweet potato or breadcrumbs.
Meat substitute steaks, mince,	Mycoprotein™, soya protein (rehydrated/reconstituted/dried textured/ concentrate/isolate),	coconut, sunflower,	barley, wheat starch, flour or chicory root fibre.

meatballs & Bolognese (category 3)	wheat protein (rehydrated textured), pea protein (textured concentrate/rehydrated), mushrooms, yellow split peas	rapeseed, palm oil	
Chicken substitutes (category 4)	tofu, Mycoprotein <sup>TM</sup> , pea protein (isolate), pea flour, soya protein (concentrate/isolate/rehydrated textured), mushrooms, wheat protein (rehydrated textured), potato protein	coconut milk/cream; or sunflower, rapeseed, palm oil	wheat flour, maize starch, breadcrumb
Sausage substitutes (category 5)	Mycoprotein™, pea protein (rehydrated/textured/isolate), pea flour, soya protein (rehydrated textured/isolate), soya, wheat protein (gluten), quinoa, mushrooms, chickpeas, tofu	sunflower, rapeseed, shea, coconut or palm oil	methylcellulose, potato starch, wheat flour, potato flakes, chicory or semolina.
Fish substitutes (category 6)	wheat protein (rehydrated/textured/gluten), soya protein (rehydrated textured/concentrate), Mycoprotein <sup>TM</sup>	sunflower, rapeseed, soyabean, flaxseed oil	cornflour, potato, wheat flour, rice flakes
Meat substitute ham, bacon & deli slices (category 7)	Mycoprotein™, soya protein (rehydrated), wheat gluten, tofu.	sunflower, rapeseed or palm oil	cornflour, oat fibre.
Pastry-based meat substitutes (category 8)	Mycoprotein™, soya protein (rehydrated textured/isolate), edamame soya bean, pea protein, cheese (goat/cow), beans (red kidney/haricot), chickpeas, chestnut mushrooms,	sunflower, coconut, rapeseed or palm oil	wheat flour, barley malt, breadcrumbs, maize starch, potato.

	wheat protein (rehydrated textured)		
Miscellaneous meat style substitutes (category 9)	Mycoprotein™, pea protein, soya protein (rehydrated textured/isolate/concentrate), wheat protein, beans, tempeh, tofu	sunflower, rapeseed, soya bean or palm oil	rice flour, wheat flour, cornflour, potato starch.
Miscellaneous	Mushrooms, cheese (cow's milk),	sunflower,	cornflour, maize,
vegetarian substitutes (category 10)	chickpeas.	rapeseed or palm oil	potato, squash, rice, wheat flour

### Nutritional profile of products surveyed

The average nutritional value of the products per 100g and the minimum and maximum value for the range of products in the category is presented in Table 4.

Table 4 Average, minimum and maximum values of nutrients per 100g for the total sample and for each category of plant-based meat-substitutes

	Protein	Energy	Carbohydrate	Sugars	Fibre	Fat	Sat fat	Salt
	Average	Average	Average	Average	Average	Average	Average	Average
	(min-max) g	(min-max) g	(min-max) g	(min-max) g	(min-max) g	(min-max) g	(min-max) g	(min-max) g
Total sample	10.7	194.8	15.5	2.5	4.9	8.9	2.1	1.1
	(0.9-30.6)	(53-347)	(0-36)	0.0 - 18.9	1.1 - 16.7	0.4 - 22	0.0 - 15.8	0.0 – 2.9
Meat-style meat substitute burgers (n=28)	15.6	206.2 (154–	10.1	1.5	4.5	10.6	2.4	1.2
	(7.9-23)	300)	(3.5–20.9)	0.0 - 4.7	1.3 - 7.4	4.6 – 20.7	0.4 - 5.6	0.8 – 1.8
Bean/vegetable-style meat substitute burgers	5.1	179.3	18.5	3.2	5.6	8.3	1.1	1
(n=36)	(3.4-11.9)	(98 – 289)	(5.7–26.5)	0.6 – 8.8	1.8 – 10.2	1.6 - 21.1	1.6 – 21.1	0.4 - 1.4
Meat substitute steaks, mince, meatballs &	14.1	158.8	8.3	1.9	5.1	6.7	2	1
Bolognese (n=31)	(3.4-30.6)	(53 – 236)	(3.2–23)	0.1 – 4.2	1.7 – 8.0	0.4 - 15.0	0.1 – 7.9	0.0 – 1.7
Chicken substitutes e.g. nuggets, southern fried, goujons, escalopes, chicken-style (excluding burgers) (n=67)	13.9 (2.2-22)	199 (84–321)	13.3 (1–31.8)	1.7 0 - 12.0	5.3 2 - 16.7	8.7 0.4 - 22	1.2 0 - 6.1	1.1 0.2 - 2.3
Sausage substitutes (n=44)	11	178.3	11.3	1.9	5.5	8.5	2.8	1.4
	(3.1-25)	(109–267)	(0.5–25)	0.0 - 5.4	1.8 – 10.3	2.5 - 17.2	0.5 - 15.8	0.8 – 2.7
Fish substitutes (n=9)	8.8	212.7	21.8	0.9	4.1	9.4	1	1.2
	(4.5-13.3)	(181–256)	(10–32)	0 - 2.1	2.9 – 6.0	2.8 – 20	0.4 - 3	0.8 – 1.7
Meat substitute ham, bacon & deli slices (n=14)	17.2	163.5	6.1	1.4	4.7	6.8	1.5	1.4
	(10.1-27)	(94–347)	(1.7–12.7)	0.3 - 3.8	1.5 - 8.5	0.5 – 21.1	0.1 – 6.1	0.9 - 2.9
Pastry-based meat substitutes including sausage rolls & pasty's (n=42)	7.7	251.7	25	2.6	3	12.8	5.8	0.9
	(3-13.4)	(128–346)	(15.5–34)	0.6 - 7	1.1 -6.2	4.9 – 20	0.7 - 9.9	0.3 - 2.3
Miscellaneous meat style substitutes e.g. kebab, melts, duck (n=20)	16	167	10.9	4	4.9	5.8	0.8	1.3
	(5-30.6)	(82–287)	(0-33.4)	0.0 - 14	3.2 - 8.2	0.4 - 12.7	0 - 2.1	0.4 - 1.8
Miscellaneous vegetarian substitutes e.g. spinach	4.6	196.6 (56 –	21.8	3.7	3.6	9.3	1.9	0.8
bites, cheese grills/melts, veg fingers (n=34)	(0.9-8.3)	284)	(5.6–32)	0.5 - 18.9	2.0 - 6.8	0.5 - 16.0	0.1 – 4.9	0.4 - 1.3
Falafel and other lentil/pulse/nut based meat substitutes (n=29)	7.3	201.2 (54 –	20.4	4.1	6.9	8.5	0.9	0.9
	(3-13.1)	336)	(1-36)	0.7 - 11.0	2.7 – 12.6	0.4 - 22	0.1 – 2.9	0.4 - 2.2

### Nutritional information presented according to Front of Pack Traffic Light Labelling

Figure 1 shows how the products were categorised when traffic light labelling criteria were applied and Figures 3 to 13 show the profile of products in each of the 11 categories. It is clear that the products as a total sample are diverse and that this diversity is apparent in each category.

Figure 2 Percentage of total meat substitute products (n=354) low, medium and high in total fat, saturated fat, sugar and salt per 100g – total sample

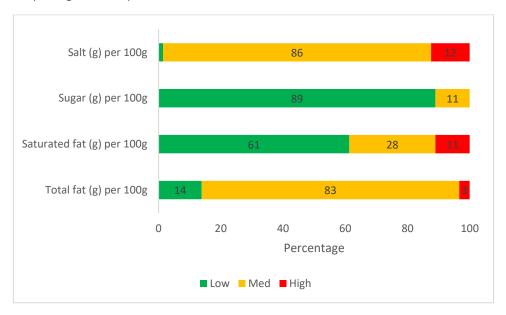
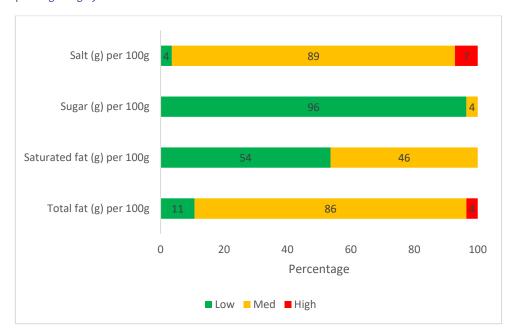
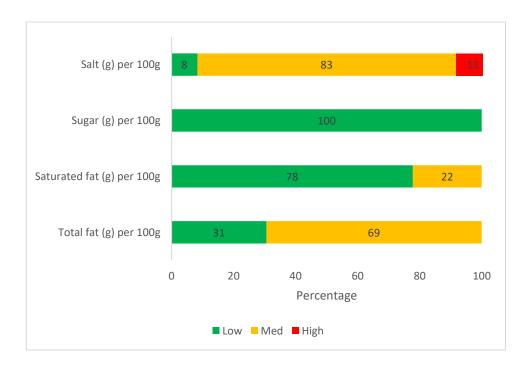


Figure 3 Percentage of meat-style substitute burgers (n=28) low, medium and high in total fat, saturated fat, sugar and salt per 100g category 1



**Figure 4** Percentage of bean/vegetable-style meat substitute burgers (n= 36) low, medium and high in total fat, saturated fat, sugar and salt per 100g category 2



**Figure 5** Percentage of meat substitute steaks, mince, meatballs & Bolognese (n= 31) low, medium and high in total fat, saturated fat, sugar and salt per 100g category 3

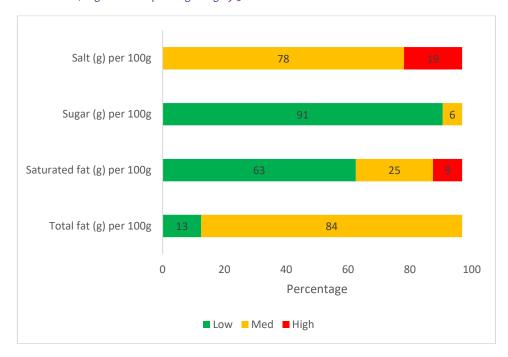


Figure 6 Percentage of chicken substitutes (n= 67) low, medium and high in total fat, saturated fat, sugar and salt per 100g (Category 4)

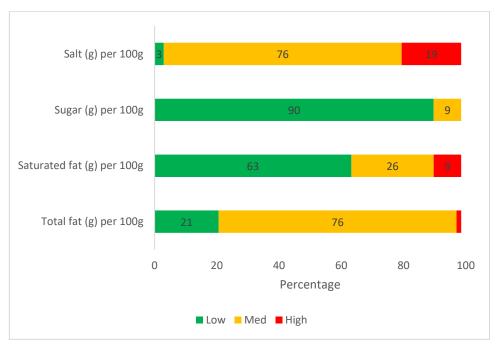


Figure 7 Percentage of sausage substitutes (n= 44) low, medium and high in total fat, saturated fat, sugar and salt per 100g category 5

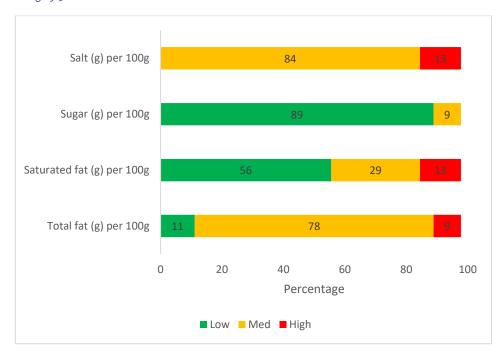


Figure 8 Percentage of fish substitutes (n= 9) low, medium and high in total fat, saturated fat, sugar and salt per 100g – category 6

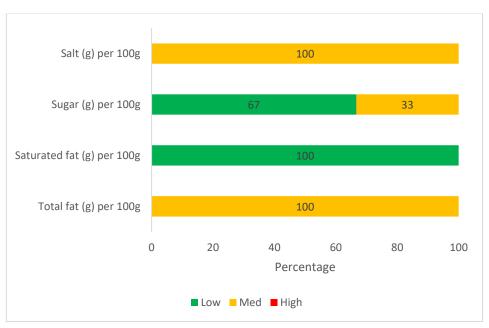


Figure 9 Percentage of meat substitute ham, bacon & deli slices (n= 14) low, medium and high in total fat, saturated fat, sugar and salt per 100g – Category 7

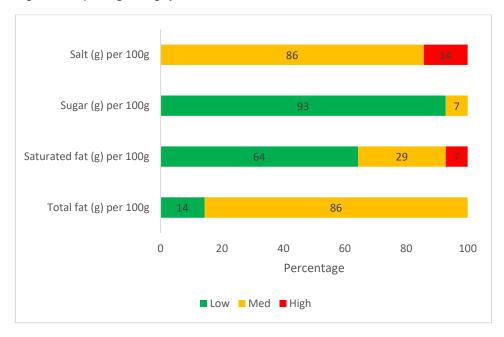


Figure 10 Percentage of pastry-based meat substitutes including sausage rolls & pies (n= 42) low, medium and high in total fat, saturated fat, sugar and salt per 100g – Category 8

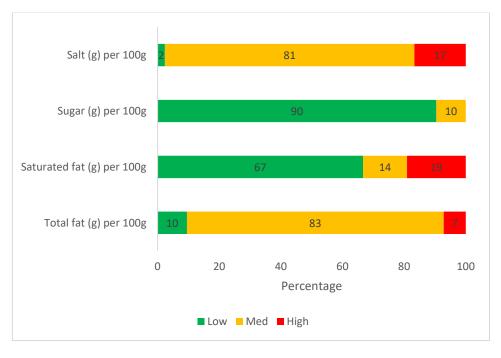


Figure 11 Percentage of miscellaneous meat style substitutes (n= 20) low, medium and high in total fat, saturated fat, sugar and salt per 100g - Category 9

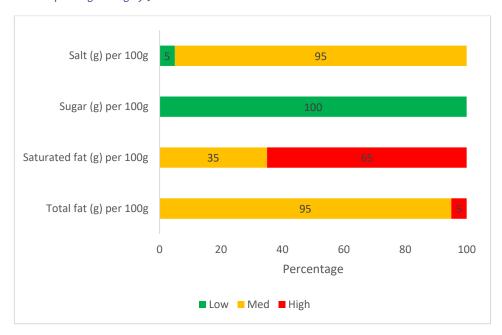
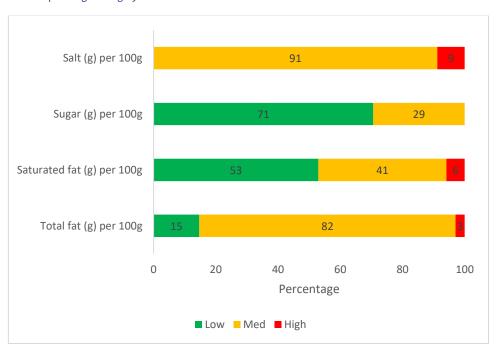


Figure 12 Percentage of miscellaneous vegetarian substitutes (n= 34) low, medium and high in total fat, saturated fat, sugar and salt per 100g - Category 10



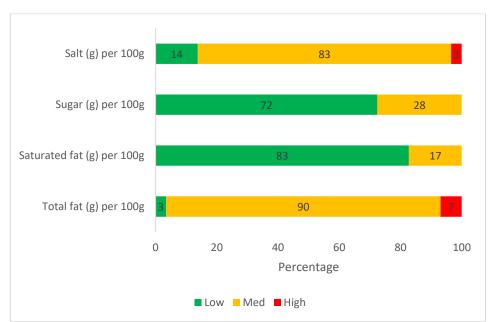


Figure 13 Percentage of falafel and other lentil/pulse/nut based meat substitutes (n= 29) low, medium and high in total fat, saturated fat, sugar and salt per 100g - Category 11

#### **Protein content**

The protein content of the products surveyed ranged from 0.9 to 30.6 g per 100g (average 10.7g per 100g). It is clear that the protein content varied both within each category and across the categories sampled (Table 1). Figure 14 illustrates the percentage energy from protein for each of the categories based on the categories used for making protein claims:

- If the percentage of energy that comes from protein is between 12 and 19.9% the product can claim to be a **source of protein**
- If the percentage of energy that comes from protein is 20% or greater the product can claim to be **high in protein**

In total, there were 84 products (23%) where the percentage of energy from protein ranged from 12-19.9% and 173 products (49%) where the percentage of energy from protein was 20% or more (Figure 14). This means that more than one quarter (28%) of the products surveyed are not a source of or high in protein and consumers need to be aware of this if relying on these foods as a protein source.

The categories where more than 50% of the products were high in protein (where energy that comes from protein is 20% or greater) included:

- Category 9 (95%) Miscellaneous meat style substitutes e.g. kebab, melts, duck
- Category 7 (93%) Meat substitute ham, bacon & deli slices

- Category 1 (93%) Meat-style meat substitute burgers
- Category 3 (87%) Meat substitute steaks, mince, meatballs and Bolognese
- Category 4 (73%) Chicken substitutes e.g. nuggets, southern fried, goujons, escalopes, chicken-style (excluding burgers)
- Category 5 (61%) Sausage substitutes

When reviewing the products for protein claims, half of the products (50%, n=178) made a protein-related claim:

- 39 products (11%) made a claim that they are a source of protein
- 139 products (39%) bear a claim that they are high in protein.

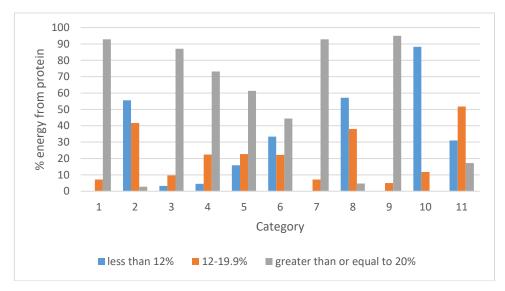


Figure 14 Percentage of energy from protein for each of the categories surveyed

#### **Carbohydrate and fibre content**

The products surveyed are also usually a source of fibre (80.2%, n=284) having at least 3g of fibre per 100g or 1.5g per 100kcal while 37.9% (n=134) were high in fibre (contains at least 6 g of fibre per 100g). This is because these foods have added carbohydrates unlike their equivalent meat products, which do not contain fibre in their natural form.

#### Comparison with equivalent meat products

A comparison of meat style meat-substitute burgers (Category 1) and bean/vegetable-style meat substitute burgers (Category 2) with their meat equivalents (Table 5) shows that:

- Meat-style meat-substitute burgers (Category 1) had an average protein content similar to a
  chicken burger, but less protein than a beef burger. This reflects the fact that the products in
  this category contain a source of protein such as wheat protein (hydrated/textured),
  Mycoprotein™, soya protein (rehydrated textured), soy structure or pea protein.
- Bean/vegetable-style meat-substitute burgers (Category 2) had a lower protein content then
  the beef, chicken and other meat substitute burgers, which reflects the fact that ingredients
  not rich in protein (mushrooms, sweet potato, beans, chickpeas, quinoa, and mixed
  vegetables) were commonly listed as main ingredients for these products.
- Both meat-substitute burgers (Category 1) and bean/vegetable-style meat substitute burgers (Category 2) were lower in energy than beef or chicken burgers.
- Both meat-substitute burgers (Category 1) and bean/vegetable-style meat-substitute burgers (Category 2) were lower in total fat than beef and chicken burgers, lower in saturated fat than beef burgers but equivalent in saturated fat to chicken/turkey burgers
- Both meat-substitute burgers (Category 1) and bean/vegetable-style meat-substitute burgers
  (Category 2) have added carbohydrate and thus are a source of fibre, unlike beef burgers
  which contain no carbohydrates or fibres. Chicken/turkey burgers do contain carbohydrates
  as they are typically coated in a breadcrumbs.
- Salt levels were similar for both burger types in comparison to beef and chicken/turkey burgers, which also contain added salt.

Table 5 Nutrition value of meat-style (category 1) & bean/vegetable-style burger substitutes (category 2) vs meat equivalents per 100g

	Meat-style burger substitutes (n=28)	Bean/vegetable- style burger substitutes (n=36)	Beef burgers, grilled	Chicken/Turkey burgers, coated
Protein (g) per 100g	15.6	5.1	27	14
Energy (kcal) per 100g	206.2	179.3	327	266
Carbohydrates (g) per 100g	10.1	18.5	0	17
-of which sugars (g) per 100g	1.5	3.2	0	0.9
Fibre (g) per 100g	4.5	5.6	0.7	0.8
Fat (g) per 100g	10.6	8.3	24	16
-of which saturates (g) per 100g	2.4	2.4	11	2.6

Salt (g) per 100g	1.2	1.0	1	0.96

A comparison of products from the meat-substitute steaks, mince, meatballs and Bolognese category with their meat equivalents (Table 6) shows that meat-substitute steaks, mince, meatballs and Bolognese:

- had less protein than their meat equivalents
- had less energy, total and saturated fat than beef mince or lean fillet beefsteak
- had more energy, more fat and less saturated fat than extra lean beef mince
- are a source of fibre and carbohydrates, unlike their meat equivalent (this is due to added carbohydrate in the plant-based meat substitutes)
- had higher salt levels

Table 6 Nutrition value of meat substitute steaks, mince, meatballs & Bolognese (category 3) vs meat equivalents per 100g

	Meat substitute steaks, mince, meatballs & Bolognese (n=31)	Beef mince, raw	Beef mince, raw, extra lean	Beef steak, fillet, lean
Protein (g) per 100g	14.1	20	22	29
Energy (kcal) per 100g	158.8	225	125	189
Carbohydrates (g) per 100g	8.3	0	0	0
-of which sugars (g) per 100g	1.9	0	0	0
Fibre (g) per 100g	5.1	0	0	0
Fat (g) per 100g	6.7	16	4.2	8
-of which saturates (g) per 100g	2.0	6.9	2.1	3.6
Salt (g) per 100g	1.0	0.2	0.23	0.18

A comparison of chicken substitutes e.g. southern fried, goujons, escalopes, chicken-style (excluding burgers) (Category 4) with their meat equivalents (Table 7) found that these products:

 had more energy, total fat and saturated fat than a plain chicken breast but less than coated chicken pieces

- were a source of fibre, unlike their meat equivalents
- had a similar amount of carbohydrates as coated chicken pieces but more than a plain chicken breast
- had higher salt levels than plain chicken breasts but lower levels than coated chicken pieces
- had less protein than their meat equivalents

Table 7 Nutrition value of chicken substitutes (category 4) vs meat equivalents per 100g

	Chicken substitutes e.g. nuggets and fillets (n=67)	Chicken breast, grilled without skin	Chicken pieces, coated, takeaway
Protein (g) per 100g	13.9	32	19
Energy (kcal) per 100g	199.0	145	268
CHO (g) per 100g	13.3	0	16
-of which sugars (g) per	1.7	0	0
100g			
Fibre (g) per 100g	5.3	0	1.3
Fat (g) per 100g	8.7	1.9	14
-of which saturates (g)	1.2	0.6	2.3
per 100g			
Salt (g) per 100g	1.1	0.14	1.3

A comparison of sausage substitutes (Category 5) with their meat equivalents (Table 8) showed that they:

- had less energy, total and saturated fat than a regular sausage
- were a source of fibre, unlike regular sausages
- had more carbohydrates than a regular sausage
- had similar salt levels to a regular sausage
- had less protein than their meat equivalents

Table 8 Nutrition value of sausages substitutes (category 5) vs meat equivalent per 100g

	Sausage substitutes (n=44)	Sausages, pork
Protein (g) per 100g	11.0	15
Energy (kcal) per 100g	178.3	298
CHO (g) per 100g	11.3	9
-of which sugars (g) per 100g	1.9	1.5
Fibre (g) per 100g	5.5	2.3
Fat (g) per 100g	8.5	22
-of which saturates (g) per	2.8	8
100g		
Salt (g) per 100g	1.4	1.6

When comparing fish substitutes (category 6, n=9) with cod in breadcrumbs (Table 9) it was found that they:

- had similar energy, total and saturated fat than cod in breadcrumbs
- had slightly more carbohydrates than cod in breadcrumbs
- had higher salt levels to cod in breadcrumbs
- had less protein than cod in breadcrumbs

Table 9 Nutrition value of fish substitutes (category 6) vs fish equivalent per 100g

	Fish substitutes (n=9)	Cod in breadcrumbs
Protein (g) per 100g	8.8	14
Energy (kcal) per 100g	212.7	206
CHO (g) per 100g	21.8	18
-of which sugars (g) per 100g	0.9	0.9
CHO (g) per 100g	21.8	18
Fat (g) per 100g	9.4	8.3
-of which saturates (g) per	1.0	1.3
100g		
Salt (g) per 100g	1.2	0.83

A comparison of ham, bacon & deli substitutes (Category 7) with their meat equivalents (Table 10) showed that they:

- had more energy, total and saturated fat than ham and chicken slices but less than bacon rashers
- had more carbohydrates than their meat equivalents
- were a source of fibre, unlike their meat equivalents
- had lower salt levels than their meat equivalents
- had the same protein content as ham but less than rashers or chicken slices.

Table 10 Nutrition value of meat substitute ham, bacon & deli slices (category 7) vs meat equivalents per 100g

	Meat substitute	Bacon rashers,	Ham slices	Chicken slices
	ham, bacon &	back, grilled		
	deli slices (n=14)			
Protein (g) per 100g	17.2	23	18	23
Energy (kcal) per 100g	163.5	287	107	114
Carbohydrates (g) per 100g	6.1	0	1	1.9
-of which sugars (g) per	1.4	0	1	0
100g				
Fibre (g) per 100g	4.7	0	0	0.5
Fat (g) per 100g	6.8	22	3.3	1.5
-of which saturates (g) per	1.5	8.1	1.1	0.4
100g				
Salt (g) per 100g	1.4	3.5	2	1.5

When comparing pastry-based meat-substitutes including sausage rolls and pies (Category 8) with their meat equivalents (Table 11) it was found that they:

- had less energy, total and saturated fat than their meat equivalents
- were a source of fibre, as were their meat equivalents
- had similar amounts of carbohydrates as their meat equivalents
- had lower salt levels than their meat equivalents
- had similar amounts of protein as their meat equivalents

Table 11 Nutritional value of pastry-based meat substitutes (category 8) vs meat equivalents per 100g

	Pastry-based meat substitutes including sausage rolls, pies, etc. (n=42)	Cornish pasties, retail	Sausage rolls, retail
Protein (g) per 100g	7.7	7	8.4
Energy (kcal) per 100g	251.7	282	356
Carbohydrates (g) per 100g	25.0	22	25
-of which sugars (g) per 100g	2.6	2	1.2
Fibre (g) per 100g	3.0	2.9	3.4
Fat (g) per 100g	12.8	18	24
-of which saturates (g) per 100g	5.8	8.5	10
Salt (g) per 100g	0.9	1.2	1.4

The final four categories of plant-based meat substitutes were not compared with any meat equivalent as there is no meat equivalent for these categories (Category 9: Miscellaneous meat style substitutes; Category 10: Miscellaneous vegetarian substitute; Category 11: Tofu, soy & tempeh; and Category 12: Falafel and other lentil/pulse/nut-based meat-substitutes).

#### Micronutrient data

Only 27 out of 354 products (7.6%) had data provided on the level of micronutrients. The only micronutrients that over 1% of the products gave data on were iron (6%) and B12 (4%). Other products provided data on the level of folic acid, vitamin A, zinc, vitamin B1, B2, B6, and niacin, omega-3 and magnesium.

#### **Consumer survey**

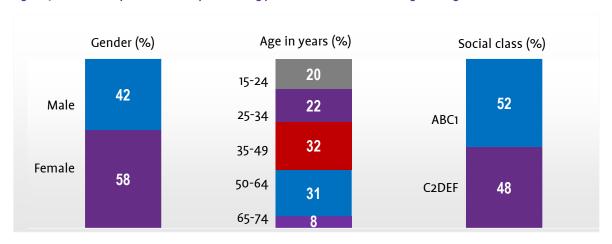
One third of consumers reported eating meat substitutes such as vegan or vegetarian versions of burgers, sausages, chicken or fish (Table 12). The profile of respondents who reported eating these products is detailed in Figure 15.

Table 12 Consumer's responses to question 'Do you ever eat meat substitutes such as vegan or vegetarian versions of burgers, sausages, chicken or fish?

	ROI % (n)	NI % (n)	IOI % (n)
Yes	32 (166)	36 (112)	34 (278)
No	68 (334)	64 (190)	66 (524)

Base ROI n=500; NI n=302; IOI n=802.

Figure 15 Profile of respondents who reported eating plant-based meat-substitutes, gender, age and social class



The most popular meat substitutes that participants reported eating were meat-substitute burgers; mince, meatballs & Bolognese; and sausage substitutes including sausage rolls (Table 13).

Table 13 Consumer's responses to question 'What types of meat substitutes do you eat?

	ROI %	NI %	IOI %
Base	N=166	N=112	N=278
Meat substitute burgers	48	31	41
Meat substitute steaks	6	7	6
Meat substitute mince, meatballs & Bolognese	25	41	31
Meat substitute ham, bacon & deli slices	7	7	7

Chicken substitutes e.g. nuggets and goujons	20	31	25
Sausage substitutes including sausage rolls	30	29	29
Fish substitutes	9	3	6
Falafels, vegetable bites etc.	21	8	16
Other includes <b>c</b> asseroles and stews, cereals, cheese, lactose free, Linda McCartney pies, "not pre-prepared but things to make from scratch", pizza, ham substitutes, lentil-based dishes	32	22	28

For those consumers who report eating plant-based meat substitutes, 48% of consumer on the island of Ireland report eating them once a week or more i.e. a combination of once a week, twice a week, three times a week and everyday (Table 14). It is important to note however that that base number of respondents is small.

Table 14 Consumer's responses to question "How often do you eat meat substitutes?"

	ROI %	NI %	IOI %
Base	N=166	N=112	N=278
Everyday	6	8	7
Three times per week	10	7	9
Twice a week	15	8	12
Once a week	27	9	20
Fortnightly	9	20	13
Once a month	14	23	17
Less often than once a month	19	25	21

Consumers reported a number of reasons for eating plant-based meat substitutes; one third reported that they select these products because of health/better for you, 21% because of taste and 15% because of environment/climate change (Table 15).

Table 15 Consumer's responses to question "Why do you eat meat substitutes?"

	ROI %	NI %	IOI %
Base	N=166	N=112	N=278
I like the taste	18	25	21
Environment/climate change	18	12	15
Animal welfare	12	5	9
Cost/it's cheaper	0	5	2
Health/better for you	35	32	33
Other reasons reported include availability; to bulk- up meals; disagreement with animal slaughtering practices; product development for work; religious reasons; and that these are food as well	45	47	46

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Vegetarian meat substitutes

## Appendix – List of products surveyed

Brand	Name	Description	Weight (g)	Energy (kcal) per 100g	Fat (g) per 100g	Sat fat (g) per 100g	Sugars (g) per 100g	Protein (g) per 100g	Salt (g) per 100g
Category 1 - Meat	t-style meat substitute bu	irgers (n=28)							
Linda McCartney	Mozarella Burgers	Seasoned vegetarian 1/4 LB burgers made with rehydrated textured soya protein, onion and mozerella cheese	227	243	13.8	1.9	1.4	18.2	1.1
Quorn	Burgers	Meat free savoury flavour burgers, made with mycoprotein.	200	174	8.1	3.4	0.7	16.0	1.2
Quorn	Meat Free Classic Burgers	Meat free savoury flavour burgers, made with mycoprotein.	180	182	8.2	3.2	1.9	18.0	1.5
Quorn	Ultimate Burgers	Meat free savoury flavour burgers, made with mycoprotein.	227	255	14.0	3.0	3.0	21.0	1.2
Naked Glory	Quarter Pounders [Fresh]	Seasoned Meat-Free Burgers made with Rehydrated Textured Soya and Wheat Protein	227	186	8.5	3.5	0.7	15.0	1.2
Birds Eye	Meat Free Burgers	Burgers formed from a blend of pea protein and herbs.	200	238	17.0	1.3	1.1	14.0	1.5
Naked Glory	Quarter Pounders [Frozen]	Seasoned Frozen Meat-Free Burgers made with Rehydrated Textured Soya and Wheat Protein	227	190	8.7	3.7	0.8	18.0	1.3
Vivera	Plant Veggie Burgers	Plant-based seasoned burger made from rehydrated soya and wheat protein. This product contains added iron and vitamin B12.	200	161	5.1	0.6	1.8	17.0	1.3

Denny	Meat Free Burgers	Made with soya protein, coconut oil and our Henry Denny seasoning	227	186	8.5	3.5	0.7	15.0	1.2
Vegafit	Burger	Vegafit 2 Burger 150g	150	300	20.7	2.3	3.0	17.0	1.8
Tesco	Meat Free Meat Style Burgers	Burgers made from a blend of seasoned rehydrated soya protein.	454	168	5.0	0.8	2.8	20.6	1.1
Asda	Vegan Beef Style Burgers	Seasoned vegan beef style burgers made with rehydrated textured soya protein and onion	454	184	8.4	0.7	0.8	18.0	1.0
Oumph	Vegan Burger	Soya burgers flavoured with vegetable seasoning.	226	172	6.6	0.7	1.9	14.0	0.8
The Meatless Farm Co.	Meat Free Burgers	2 meat free burgers made with pea protein	227	230	14.8	4.7	0.3	17.1	1.5
Quorn	Vegan Hot and Spicy Burger	Meat free savoury flavour burgers, made with mycoprotein, in a hot & spicy breadcrumb.	264	245	11.1	0.8	1.4	12.3	1.2
Quorn	Chicken Style Burgers	Meat free chicken flavour burgers, made with Mycoprotein, coated in breadcrumbs.	252	205	8.6	1.0	1.1	12.1	1.5
Linda McCartney	Vegetarian Southern- Style Chicken Fillet Burgers	Seasoned Vegetarian Chicken-Style Burgers made with Rehydrated Textured Soya and Wheat Protein; in a Crispy Southern Fried Coating.	270	230	11.7	1.1	0.2	17.5	1.3
Linda McCartney	Vegetarian 1/4 Pounder Burger	Amazingly indulgent, High protein, Vegetarian Society approved	227	220	11.9	0.9	1.7	17.3	1.0
Linda McCartney	Vegetarian Pulled Pork 1/4 LB Burgers	Vegetarian Pulled Pork-Style 1/4 lb Burgers Made with Rehydrated Textured Soya and Wheat Protein Coated with a Smoky Flavour Barbecue Sauce.	227	154	4.6	0.4	4.7	16.1	1.8
Plant Pioneers	Ultimate Plant Burgers	Seasoned vegetarian burgers made with rehydrated textured soya protein	210	213	11.6	1.9	2.2	16.2	1.2
The Vegetarian Butcher	Chickened Out Burger	Chickened Out Burger source of protein soy-based burger	160	175	12.3	3.6	0.4	7.9	1.2

Fry's	Meat Free Chicken- Style Burgers	Chicken-Style burgers coated with a crispy golden crumb.	320	197	12.3	1.5	0.5	8.9	1.4
Beyond Meat	Beyond Burger Plant Based Burger	Plant based patties made with pea protein	226	252	19.0	5.6	0.0	17.0	0.8
Tesco	Plant Chef 2 Meat Free Burgers	Vegetable suet, pea protein, onion and seasoning formed into patties.	226	192	6.6	3.2	2.5	11.8	1.2
Wicked Kitchen	Jalapeno Griller Patties	Jalapeños, red pepper, pea protein, rice flour and maize flour blended with spices and seasoning and formed into patties.	226	188	6.9	4.4	3.2	9.7	1.6
Asda	Vegan Quarter Pounders with Cheddar Alternative & Red Onion	Seasoned vegan quarter pounder beef style burgers made with rehydrated textured soya protein, coconut oil based alternative to Cheddar and red onion	227	174	7.9	4.9	0.8	16.0	0.9
No bull	Vegan Steak-Style Burgers	Flavoured rehydrated wheat protein mix, frozen.	226	266	15.0	1.7	0.6	23.0	0.8
Quorn	Southern Style Burgers (re screenshot)	Meat Burgers, made with Mycoprotein™, coated in a southern style crumb	252	194	8.8	2.1	3.1	10.9	0.9
Category 2 - Bean	/vegetable-style meat sul	bstitute burgers (n=36)							
Vivera	Pumpkin Sweet Potato Burgers	Plant-based burger made from pumpkin, sweet potato and soya protein and seasoned with spices.	200	132	6.6	0.7	3.5	5.0	1.4
GoodLife	Supergreen Pesto Burger with Edamame Beans, Kale & Spinach	Burger made from peas, edamame soya beans, onions, kale and spinach with pesto.	226	155	7.2	2.0	0.6	8.5	0.6
Asda	Plant Based Meat-Free Burgers	Gluten free burgers with white mushrooms and oyster mushrooms	260	149	9.6	2.8	1.4	5.9	0.9
Plant Pioneers	Smoky 'Jack' Quarter Pounders	Mushroom & jackfruit vegan burgers with natural flavourings.	227	141	4.2	1.9	1.9	6.2	1.2

Goodlife	Katsu Curry Burger	Burger made from sweet potato, edamame soya beans, rice, carrot puree, coconut cream with katsu curry paste.	214	156	7.4	3.2	0.8	7.0	0.7
Sainsbury's	Vegan Mix Burger	Mixed vegetable burger with mushroom, fried onion, sweetcorn, peas and red kidney beans	225	132	1.8	0.2	2.1	6.0	1.1
The Happy Pear	Quarter Pounder	The Happy Pear Quarter Pounders 227g	227	144	5.4	0.1	4.0	4.4	1.0
Heck	Ultimate Vegan Burgers	Burgers made from Beetroot, Mushroom, Sunflower Seeds and Carrot	228	174	10.2	1.1	3.5	4.6	1.4
Tesco	Sweet Potatoes & Blackbean Burgers	Black turtle beans, green lentils, cooked long grain rice, mushroom, roasted sweet potato, breadcrumb and roasted red pepper sauce burgers.	215	150	1.6	0.3	5.2	5.3	0.9
Tesco	Peanut Burgers	2 peanut, brown rice, edamame soya bean, red pepper, avocado, sweet potato and curry seasoning burgers.	227	289	21.1	1.7	6.0	11.9	0.4
Strong Roots	Bulgarwheat Bean Beetroot Burger	Kidney beans, beetroot and bulgar wheat. Perfectly seasoned and full of flavour.	450	234	13.5	1.2	1.4	4.0	1.4
Gosh!	Beetroot Kale Burgers	Beetroot burgers made with kale, chickpea, quinoa, carrot, courgette and a hint of mint.	250	151	5.0	0.6	0.8	5.5	0.8
Strong Roots	Beetroot & Bean Burger	Kidney Beans, Beetroot and Bulgur Wheat, Perfectly Seasoned and Full of Flavour.	450	234	13.5	1.2	1.4	4.0	1.4
Strong Roots	Pumpkin Burger	Pumpkin, mixed vegetables and a puffed quinoa coating combined in a delicious vegetable patty.	450	202	9.3	0.8	2.5	3.9	0.7
Strong Roots	Kale and Quinoa Burgers	A healthy blend of quinoa, kale and mixed vegetables with a crispy coat and full of taste.	450	201	11.3	1.4	1.9	4.2	0.8
Birds Eye	Crunchy Vegetable Quarter Pounders	Prefried vegetable quarter pounder coated in a light breadcrumb.	454	186	8.1	1.0	2.6	4.3	0.9

Tesco	Plant Chef Spicy Bean Burgers	Burgers made with vegetables and spicy beans coated in herby breadcrumbs.	454	201	9.1	0.9	2.2	4.8	0.9
Tesco	Plant Chef Veg Burgers	Seasoned vegetables in a crispy breadcrumb coating.	454	216	10.0	0.9	3.9	3.7	0.6
Eden	Curried Cauliflower Burger	2 curried cauliflower burgers	240	98	2.7	0.4	2.5	3.4	1.2
Clover & Greene	Crunchy Veg Burger	A delicious burger made with a mix of carrots, spinach and onions, coated in a cornflake crumb.	320	242	11.8	1.9	4.2	5.8	1.1
Clover & Greene	Avocado & Quinoa Burger	A delicious burger made from avocado and quinoa	320	236	15.0	1.6	1.8	6.2	1.0
Glas	Vegetable Burger	Succulently sweet, 1 of your 5 a day, Steamed, Suitable for vegetarians and vegans	240	111	3.2	0.6	2.8	3.5	1.0
Glas	Beetroot & Kale Burger	With kidney beans, 1 of your 5 a day, Steamed, Suitable for vegetarians and vegans	240	107	3.0	0.5	3.7	3.9	1.1
Strong Roots	Pea and Wakame Seaweed Burger	A blend of pea, Edamame bean and Wakame seaweed with a crispy coating speckled with black and white sesame seeds.	375	208	9.4	0.9	8.8	5.4	1.0
The Happy Pear	Falafel Burger	The Happy Pear Falafel Burgers 227g	227	177	8.9	1.0	4.0	5.5	1.2
Amy's Kitchen	Manhattan Veggie Burgers	Made with vegetables, walnuts and quinoa (an ancient protein-rich grain), this burger is free from dairy, gluten and soy, but full of flavour.	270	125	4.2	0.0	2.8	3.8	1.4
Asda	Vegan Spicy Bean Burgers	Blended with haricot and red kidney beans, carrots and green peppers, wrapped in a crisp crumb	454	228	11.0	1.3	3.8	4.8	0.9
Asda	Plant Based 4 Vegan Vegetable Burgers	Vegan burgers made with carrot, peas, sweetcorn, onion, red pepper, green beans, leek, cauliflower and potatoes, seasoned and coated in breadcrumbs	454	192	7.9	0.8	3.1	3.9	0.9

Asda	Vegan Sweet Potato Falafel Burgers	Gluten free burgers with chickpeas, roasted sweet potato, red onions & spinach	227	169	6.2	0.7	5.8	4.2	0.7
Asda	Vegan Butternut Squash, Sweet Potato & Red Pepper Burgers	Vegetarian burgers made with butternut squash, sweet potato, red peppers, chickpeas, tomatoes, quinoa and red chillies	230	142	5.5	0.6	8.8	3.7	0.8
Birds Eye	Veggie Burgers	Vegetable burger coated in light breadcrumbs, lightly fried.	250	177	7.5	1.0	2.1	4.4	0.8
Sainsbury's	Sweet Potato, Quinoa & Lentil Burger	burger made from Sweet Potato, Quinoa and green lentils with Bulgur Wheat, Onion, Red Pepper, Edamame Beans, Courgette and Seasoned with fragrant spices	350	192	9.4	1.0	1.6	4.7	0.8
Sainsbury's	Vegetable Quarter Pounders	Vegetarian burgers made with mixed vegetables, seasoned and coated in breadcrumbs	454	221	9.9	1.1	3.0	4.8	0.8
Sainsbury's	Indian Lentil Quarter Pounder	Vegetarian quarter pounder made with mixed vegetables, lentils and rice seasoned with herbs and spices	454	148	4.2	0.5	5.1	4.5	1.0
Sainsbury's	Spicy Bean Quarter Pounders	4 Spicy bean quarter pounders with black turtle beans and haricot beans in a parsley breacrumb coating	454	197	9.9	1.0	1.0	4.5	0.8
Tesco	Vegetarian Monterey Jack BBQ Bean Burgers	A mix of haricot and black turtle beans, with pockets of Monterey Jack cheese encased in a Kentucky inspired batter and crispy crumb	280	238	12.5	2.1	6.3	6.1	0.9
Category 3 - Meat	substitute steaks, mince	, meatballs & Bolognese (n=31)							
Quorn	Quorn Meat Free Peppered Steaks 2 Pack	Vegetarian grill steak made with mycoprotein with a pepper coating	196	112	4.9	2.2	2.8	11.7	1.3
Quorn	Meat Free Mince	Meat free mince, made with mycoprotein	350	105	2.0	0.5	0.6	14.5	0.3
Dolmio	Plant Based Bolognese	Tomato sauce with plant protein (from soya), basil & carrots	150	71	1.7	0.2	4.2	5.7	0.7

Naked Glory	Mince	Seasoned Meat-Free Mince made with Rehydrated Textured Soya and Wheat Protein	260	180	6.0	4.4	0.3	20.0	1.5
Vivera	Veggie Mince	lant-based mince made from rehydrated soya protein.	220	126	0.6	0.1	0.7	20.0	1.0
Vivera	Veggie Steak	Plant-based steak made from rehydrated soya and wheat protein	200	195	10.0	4.7	1.1	18.0	1.3
Denny	Meat Free Mince	Made with soya protein, coconut oil and our Henry Denny seasoning	260	180	6.0	4.4	0.3	20.0	1.5
Dolmio	Plant Based Bolognese Firey Chilli	With delicious meat free mince, Naturally high in plant protein, Suitable for vegans	150	77	1.7	0.2	3.9	6.1	0.7
Tesco	Meat Free Vegetarian Mince	A blend of lightly seasoned, rehydrated soya protein pieces	454	99	0.8	0.3	3.0	15.1	0.2
Asda	Plant Based Vegan Meat Free Mince	Seasoned vegan mince made from rehydrated textured soya protein pieces	454	179	5.3	1.1	2.6	22.0	0.6
Granose	Soya Mince	Dried Soya Mince	100	74	0.4	0.1	1.7	12.1	0.0
Beanit	Pan-Fry Protein Mince	Cooked pea protein and fava bean mince	175	229	9.6	0.9	0.7	30.6	1.1
Plant Pioneers	Meat Free Mince	Seasoned vegetarian mince made from rehydrated textured soya protein pieces	500	141	2.6	1.0	1.6	20.1	0.5
The Meatless Farm Co.	Meat Free Mince	Meat free mince made with soya, pea and rice proteins	400	199	10.2	3.9	0.1	19.1	0.6
The Meatless Farm Co.	Meat Free Ground Mince	Meat free ground mince made with soya, pea and rice proteins	400	199	10.2	3.4	0.7	21.1	0.8
Goodlife	Vegetable Prtn Balls With Spinach And Kale	Savoury vegetable balls with pea protein and chickpeas.	300	212	11.1	1.7	3.0	15.2	0.9
Tesco	Plant Chef Meat Free Balls	Vegetable suet, pea protein, flavouring and seasoning, formed into balls.	336	194	7.6	3.7	1.6	13.1	1.6

Birds Eye	Meat Free Swedish Style Balls	Balls formed from a blend of pea protein, herbs and spices, lightly fried.	280	236	15.0	1.3	1.4	16.0	1.5
GoodLife	Vegetable Protein Balls	Savoury vegetable balls with pea protein and chickpeas.	300	212	11.1	1.7	3.0	15.2	0.9
Linda McCartney	Vegetarian Tomato & Basil Meatballs	Vegetarian meatballs made with rehydrated textured pea protein, tomato purée and basil.	292	219	13.4	1.0	2.3	12.8	1.0
Asda	Plant Based Vegan Meat Free Meatballs	Prepared with soya and onion and delicately seasoned with a pinch of black pepper	400	157	6.7	0.5	1.2	16.0	0.8
Linda McCartney	Vegetarian Meatballs	Seasoned Vegetarian Meatballs Made with Rehydrated Textured Soya Protein, Onion Purée and Basil.	240	185	8.6	0.7	0.6	17.5	1.7
Plant Pioneers	Shroomballs	Jackfruit and mushroom vegan balls		121	3.1	1.2	1.9	7.3	1.1
Asda	Meat-Free Mince	Gluten free mince with oyster mushrooms	275	141	9.0	2.8	1.4	6.4	0.8
Asda	Meat-Free Meatballs	Gluten free meat-free balls with white mushrooms and oyster mushrooms	276	149	9.6	2.8	1.4	5.9	0.9
Asda	Vegetarian Bolognese	Soya mince in a rich tomato sauce with onion and herbs	392	53	1.2	0.1	4.2	3.4	0.5
No bull	Vegan Mushrooms Steaks	Mushrooms with tomato, onion and herbs, shaped as a steak.	160	136	9.0	1.0	1.4	4.1	0.9
Naturli	Minced	Pea Based Mince	400	210	11.0	7.9	1.6	18.0	1.3
Plant Pioneers	Vegan Steaks	2 vegan steaks made from mushrooms, wheat gluten, coconut milk and natural flavourings	227	170	5.8	2.3	2.0	13.8	1.1
Wicked Kitchen	Spiced Amazeballs	vegetable suet, pea protein, spices and seasoning, formed into balls.	336	197	8.7	3.6	2.4	13.1	1.6
Asda	Plant Based 12 Vegan Tomato & Halloumi Alternative Balls	Gluten free stuffing with yellow split peas, red onions, brown rice, smoked tomatoes and non-dairy alternative to Halloumi	240	164	5.0	1.7	3.8	3.4	0.9

Category 4 - Chicken substitutes e.g. nuggets, southern fried, goujons, escalope's, chicken-style (excluding burgers) (n=67)

Quorn	Southern Fried Bites	Meat free bites, made with mycoprotein, coated in southern style crumb.	300	199	8.1	1.3	1.9	10.3	1.2
Quorn	Chicken Style Pieces	Meat free savoury pieces made with mycoprotein.	500	99	2.6	0.8	0.6	13.8	0.8
Quorn	Meat Free Roast Style Sliced Fillets	Vegetarian roast chicken flavour sliced Fillets, made with mycoprotein.	140	140	7.1	1.2	0.4	13.7	0.7
Linda McCartney	Vegetarian Chicken Bucket	A selection of 8 vegetarian chicken-style pieces made from rehydrated textured soya and wheat protein; with a crispy southern fried coating and 10 smaller vegetarian chicken-style bites made from rehydrated textured soya protein; with a chilli breadcrumb coating.	390	261	15.0	1.0	1.0	14.6	1.0
Quorn	Sweet Chipotle Goujons	Meat free savoury flavour goujons, made with mycoprotein, in a sweet chipotle chilli coating	180	188	4.3	0.5	0.6	12.2	0.8
Vivera	Veggie Chicken Pieces	Plant-based pieces made from rehydrated soya protein and seasoned with onion extract.	175	118	0.5	0.1	0.6	19.0	1.7
Quorn	Family Roast	Meat free savoury flavour roast made with mycoprotein.	454	114	2.7	1.0	0.8	16.7	1.1
Quorn	Vegan Pieces	Meat free savoury pieces, made with mycoprotein	280	113	2.8	1.0	0.4	15.3	0.4
Quorn	Thai Bites	Meat free savoury flavour bites, made with mycoprotein, seasoned with ginger, coriander, red chilli and lemon grass.	180	205	8.9	2.2	3.1	19.7	1.2
Cauldron	Tofu Pieces	Marinated soybean curd	160	232	17.0	2.5	1.0	18.0	1.5
Fry's	Meat Free Chicken Style Strips	Succulent strips made from proteins which comes from grains and legumes, lightly seasoned with a blend of herbs and spices	380	218	11.8	1.4	0.2	18.3	1.3
Naked Glory	Tikka Tender Strips	Marinated Frozen Meat-Free Rehydrated Textured Soya Protein Pieces	280	130	2.7	0.3	0.8	20.0	1.4

Quorn	Smoky Fajita Fillet Strips	These delicious strips are seasoned with Mexican spices	180	108	2.8	0.3	1.4	14.0	0.4
Quorn	Spicy Tikka Fillet Strips	Tasty Quorn Strips are seasoned with Indian spices.	180	101	2.3	0.4	0.5	15.0	0.4
Quorn	Vegan Nuggets	Proudly meat free, Crunchy, dippable delights, High in protein and fibre, Suitable for vegans	280	204	3.1	0.3	2.2	12.0	1.5
Vegafit	Nuggets	Vegafit Nuggets 200g	200	305	14.1	1.5	2.3	2.7	2.2
Linda McCartney	Vegetarian Southern- Style Chicken Pieces	Vegetarian Chicken - Style Pieces made from Rehydrated textured soya and wheat protein; with a crispy southern fried coating.	230	265	15.8	1.0	0.2	16.9	1.3
Tesco	Meat Free Chicken Style Nuggets	Chicken style nuggets made from soya and wheat protein coated in a crumb.	320	209	7.9	0.8	2.0	12.4	1.0
Tesco	Meat Free Chicken Style Pieces	Chicken style pieces made from wheat and soya protein.	300	166	6.3	0.7	1.3	18.3	0.9
Naked Glory	Smoky BBQ Deli Readybites	Meat-Free Rehydrated Textured Soya Protein Pieces with BBQ Flavoured Marinade	165	115	0.4	0.1	5.2	18.0	1.5
Naked Glory	Tikka Deli Readybites	Meat-Free Rehydrated Textured Soya Protein Pieces with Tikka Flavoured Marinade	165	130	2.7	0.3	0.8	20.0	1.4
Quorn	Vegan Fillets	Meat free savoury flavour fillets, made with mycoprotein	252	92	0.6	0.2	0.5	14.2	0.5
Quorn	Breaded Fillets	Meat free savoury flavour mini fillets, made with Mycoprotein™, coated in breadcrumbs	300	196	9.6	2.0	1.9	10.2	1.3
Fry's	Artisan Lightly Seasoned Vegan Chicken-Style Strips	Lightly Seasoned Chicken-Style Strips	250	188	5.4	1.3	0.1	18.8	1.3

Fry's	Vegan Artisan Southern-Style Tenders	Southern-Style Tenders	235	186	11.0	5.3	0.1	11.3	1.2
Naked Glory	Roast Tenderstrips	Seasoned Meat-Free Rehydrated Textured Soya Protein Pieces	240	143	4.6	0.4	0.5	20.0	1.5
Plant Pioneers	Meat Free Chicken- Style Pieces	Seasoned vegetarian chicken-style pieces made with rehydrated textured soya protein	300	254	16.6	1.2	0.5	17.1	0.8
Quorn	Fillets	Meat free savoury fillets, made with Mycoprotein™	312	84	1.6	0.7	0.7	12.5	0.8
Quorn	Southern Fried Poppers	Meat free savoury flavour bites, made with mycoprotein, coated in pepper breadcrumb	60	298	16.0	1.2	0.2	16.0	1.3
Squeaky Bean	Marinated Chicken Style Pieces Kick of Tikka	Ready to Eat Tikka Marinated Pieces Made from Wheat & Pea Protein.	160	192	7.0	0.9	4.0	22.0	1.5
Squeaky Bean	Marinated Chicken Style Pieces BBQ	Ready to Eat Barbecue Marinated Pieces Made from Wheat & Pea Protein.	160	194	7.3	0.9	5.0	21.0	1.4
Squeaky Bean	Satay Kiev	Vegan satay kiev made from rehydrated soya and wheat protein with a peanut-free satay sauce, with added iron and vitamin B12.	200	207	7.8	0.9	6.1	14.0	1.6
Squeaky Bean	Crispy Nuggets	Vegan nuggets made from rehydrated soya and wheat protein with added iron and vitamin B12.	200	232	9.3	1.0	2.6	13.0	1.5
Vivera	Plant Chicken Tenders	Plant-based tenders made from rehydrated soya and wheat protein. This product contains added iron and vitamin B12.	210	161	8.0	0.9	0.5	17.0	1.3
Vivera	Plant Chicken Goujons BBQ	Plant-based goujons made from rehydrated soya and wheat protein seasoned with BBQ herbs. This product contains added iron and vitamin B12.	200	192	7.5	0.9	3.1	14.0	1.4

Quorn	Meat Free Cheese Escalopes	Meat free savoury flavour escalopes, made with Mycoprotein™, topped with Emmental cheese and coated in breadcrumbs	220	227	11.4	6.1	1.6	11.9	1.3
Quorn	Mozzarella & Pesto Escalope	Meat free savoury flavour escalopes, made with Mycoprotein™, topped with mozzarella, soft cheese & pesto sauce and coated in breadcrumbs.	240	226	12.9	3.3	2.0	10.0	1.5
Quorn	Cheese And Broccoli Escalopes	Meat free savoury flavour escalope, made with mycoprotein, topped with a cheese and broccilo sauce and coated in breadcrumb.	240	203	8.7	1.6	1.1	9.6	1.4
Vegafit	Schnitzel	Vegafit 2 Schnitzel 200g	200	294	14.4	1.5	2.3	15.7	2.1
Fry's	Golden Crumbed Schnitzels	Meat Free 4 Golden Crumbed Schnitzels	320	247	13.7	1.9	0.6	11.7	1.4
Quorn	Garlic & Mushroom Escalopes	Meat free savoury flavour escalope, made with Mycoprotein™, topped with a cheese, mushroom and garlic sauce and coated in breadcrumbs	240	216	10.3	3.3	1.7	10.4	1.1
Quorn	Fillets Crispy	Quorn Crispy Fillets are succulent vegetarian chicken coated in a light, crispy golden batter.	200	192	8.5	1.5	2.0	12.5	0.5
Quorn	Crispy Nuggets	Meat free savoury flavour nuggets made with mycoprotein coated in a crispy batter.	476	190	8.3	0.8	1.9	9.4	1.2
Quorn	Vegan Crunchy Tex Mex Nuggets	Meat free savoury flavour nuggets made with mycoprotein in a spiced breadcrumb with quinoa, oats, barley & linseed.	200	239	11.0	0.9	1.1	11.0	0.8
The Vegetarian Butcher	Little Peckers	Little Peckers soy-based chicken-style nuggets	180	237	12.7	0.9	0.7	9.6	1.5

Fry's	Meat Free Chicken- Style Nuggets	A Blend of Vegetable Protein and Sunflower Oil, with a Golden Crumb.	380	321	22.0	3.0	3.0	13.9	1.7
Plant Pioneers	Meat Free Chicken- Style Nuggets	Seasoned vegetarian chicken-style nuggets made from rehydrated textured soya protein, coated in crispy breadcrumbs	320	253	12.5	0.9	1.2	12.2	0.4
Plant Pioneers	Hotnspicy Goujons	6 Vegan strips coated and fried with mushrooms, jackfruit, wheat gluten, coconut milk and natural flavourings	210	220	10.2	0.9	2.3	9.6	1.0
Plant Pioneers	Southern Fried Bites	Vegan coated and flash fried pieces made with mushroom, wheat gluten, coconut milk and natural flavourings	200	224	10.1	0.9	1.4	10.0	1.0
Quorn	Vegan Spicy Tortilla Escalopes	Meat free savoury flavour escalope, made coated in a spicy tortilla breadcrumb.	220	242	13.0	1.5	3.0	11.0	0.9
The Tofoo Co.	Crispy Wholemeal Chunkies	Organic handmade tofu Chunkies in a crispy crumb	225	238	12.6	0.9	3.4	12.7	0.5
Like Meat	Pea Based Curry Chicken	Pea based chunks with curry marinade	160	157	5.1	0.8	0.4	18.0	2.3
Like Meat	Soya Based Organic Chicken Bites	Soya based chunks with chicken taste	180	114	2.2	0.3	0.3	18.0	1.3
Like Meat	Soya Based Nuggets	Soya based nuggets, breaded and pre-fried	180	215	9.7	1.2	0.5	12.0	1.2
Tesco	Plant Chef Breaded Goujons	Soy protein coated in breadcrumbs.	190	239	8.6	1.0	0.9	13.7	1.0
Tesco	Plant Chef Southern Fried Fillets	Soy protein coated in spiced breadcrumbs.	250	218	10.4	1.1	0.5	17.4	1.2
The Vegetarian Butcher	What The Cluck	high protein soy-based chicken-style chunks	160	154	4.4	0.5	0.5	19.9	1.9

The Tofoo Co.	Organic Sweet Chilli Bites	Organic handmade tofu bites in a surprisingly cheeky chilli crispy crumb.	225	316	14.7	1.5	6.7	12.9	1.0
The Tofoo Co.	Crispy Southern Fried Bites	Crispy southern fried bites	225	241	14.2	0.9	3.0	12.4	0.7
Little Roots	Sweet Potato and Pumpkin Nugget	Little bites for family, 100% natural ingredients, No added sugar, GMO free, Suitable for vegans	200	185	9.4	1.0	5.1	3.0	0.6
Asda	Vegan Cauliflower Popcorn	Cauliflower florets coated in crisp batter, subtly spiced with chilli, cumin and fragrant coriander	300	150	6.1	0.7	1.3	2.2	0.2
Asda	Plant Based Vegan Meat Free Chicken Bites	Vegan chicken-style pieces made with rehydrated textured soya protein, with a crispy southern fried style coating	250	253	15.0	1.0	0.6	13.0	0.6
Asda	Plant Based Vegan Meat-Free Chicken Nuggets	Chicken-style nuggets made from rehydrated textured soya protein, coated in a crispy breadcrumb	320	256	14.0	0.9	0.8	13.0	0.5
No Chick	Meat Free Strips	Seasoned and flavoured soya protein.	320	124	2.8	0.4	0.0	19.7	1.3
Gardein	Seven Grain Crispy Tenders	Juicy chick'n breaded with wholesome grains including oats, quinoa, and millet.	255	201	8.8	0.0	0.0	16.0	1.1
Gardein	Mandarin Orange Crispy Chick'n	Vegan bites based on soy and wheat protein with sauce.	225	257	5.0	0.4	12.0	9.1	1.2
Like Meat	Soya Based Schnitzel	Soya based Schnitzel, breaded and pre-fried	180	242	12.0	1.5	0.3	11.0	1.3
Category 5 - Saus	age substitutes (n=44)								
Quorn	Sausages	Meat free savoury flavour sausage, made with mycoprotein, with a herb seasoning.	336	155	5.2	0.8	1.0	8.9	1.1
Birds Eye	Meat Free Sausages	Sausages formed from a blend of pea protein, herbs and spices, lightly fried.	300	210	12.0	1.1	2.2	16.0	1.5

Linda Mccartney	Vegetarian Sausages (Frozen)	seasoned vegetarian sausages made with rehydrated textured soya protein	270	153	6.2	0.9	0.7	18.6	1.4
Quorn	Meat Free Cocktail Sausages	Meat free savoury flavour mini sausages, made with mycoprotein.	180	209	12.0	0.9	0.9	13.0	1.3
Denny	Meat Free Sausages	Seasoned Meat-Free Sausages Made with Rehydrated Textured Soya and Wheat Protein	336	145	5.4	4.0	0.7	8.8	1.8
Naked Glory	Sausages	Seasoned Meat-Free Sausages made with Rehydrated Textured Soya and Wheat Protein	240	152	5.6	4.1	0.7	9.9	1.3
Richmond	Meat Free Sausages	Seasoned Meat-Free Sausages made with Rehydrated Textured Soya and Wheat Protein	336	145	5.4	4.0	0.7	8.8	1.8
Fry's	Meat Free Original Hot Dogs	Original Hot Dogs Infused with an Authentic Hickory Smoke Flavour.	360	241	17.2	15.8	0.5	16.9	2.0
GoodLife	Mighty Non Meaty Sausages	Vegan sausage made from mushroom, red onion, lentils seasoned with herbs and spices.	252	147	4.0	1.1	1.9	11.7	0.9
Linda McCartney	Red Onion & Rosemary Sausages	Amazingly Indulgent Vegetarian Red Onion & Rosemary Sausages	270	123	3.2	1.1	1.8	16.5	1.3
Linda McCartney	Vegetarian Chorizo & Red Pepper Sausages	Vegetarian Chorizo Sausages Made with Rehydrated Textured Soya Protein, Red Pepper, Tomato Purée and Smoked Paprika.	270	158	6.4	0.9	2.9	14.1	1.1
Naked Glory	Vegan Sausages	Seasoned Frozen Meat-Free Sausages made with Rehydrated Textured Soya and Wheat Protein	320	150	4.0	3.5	0.7	10.0	1.3
Tesco	Plant Chef Herby Bangers	Seasoned meat free sausages made with rehydrated textured soya protein.	300	171	8.5	0.9	2.0	16.9	1.3
Fry's	Artisan Smoked Hot Dogs	Smoked Hot Dogs	230	190	12.2	4.0	0.1	17.2	1.6
Linda McCartney	Vegetarian Sausages (fresh)	Seasoned Vegetarian Sausages made with Rehydrated Textured Soya Protein.	300	155	5.9	1.0	0.6	20.0	1.4

Moving Mountains	Plant-Based Hot Dogs	Plant-Based Hot Dogs	240	128	9.0	7.7	2.5	7.0	1.2
Moving Mountains	Plant-Based Sausages	Plant-Based Sausages	228	250	13.6	9.6	0.7	14.0	1.5
Quorn	Cumberland Sausages	Meat free vegan sausage with a Cumberland seasoning made with mycoprotein	300	222	9.9	3.7	2.0	17.9	1.5
The Meatless Farm Co.	Meat Free Sausages	6 meat free sausages made with pea protein	300	234	15.9	5.0	0.3	14.4	1.3
Eden	Vegan Sausages	Lightly seasoned vegan sausages	270	172	6.7	0.7	2.7	7.8	1.7
Heck	Vegan Breakfast Sausages	Sausages made from Mushroom, Carrot and Tomato with Parsley and Sage	255	146	7.8	1.0	5.1	5.5	1.8
Moving Mountains	Plant-Based Sausage Burgers	Plant-Based Sausage Burgers	227	250	14.0	10.0	0.7	11.0	1.6
Plant Pioneers	Chorizo Shroomdogs	vegan chorizo style mushroom sausages	280	158	6.6	3.1	1.2	6.0	1.0
Plant Pioneers	Cumberland Shroomdogs	Vegan sausages made from mushroom, fried onions, seasoned with herbs.	500	137	4.0	2.3	1.7	6.6	1.0
Plant Pioneers	Caramelised Onion Shroomdogs	Mushroom and red onion chutney sausage	300	142	3.7	1.9	3.7	7.0	1.1
Sainsbury's	Roasted Red Pepper Shroomdogs Sausages	Vegan Sausages made from mushrooms, roasted red pepper, chickpeas, onions, seasoned with herbs, roast garlic & fennel	500	109	2.5	1.3	2.7	4.7	1.0
Tofurky	Italian Sausage with Sun-Dried Tomatoes and Basil	Tofu & Wheat Gluten Sausages with Sun-Dried Tomato and Basil	250	267	15.0	1.4	2.4	25.0	1.2

Cauldron	Lincolnshire Sausages	Lincolnshire sausages made from rehydrated vegetable protein with a sage & pepper seasoning.	276	182	9.8	0.8	1.3	16.1	1.3
Cauldron	Cumberland Sausages	Cumberland sausages made from rehydrated vegetable protein with a herb & pepper seasoning.	276	163	8.6	0.8	1.0	14.0	1.3
Heck	Super Green Sausages	Sausages made from Quinoa and Spinach with Ginger, Chilli and Mint	255	157	6.8	0.6	3.0	4.7	1.3
Heck	The Beet Goes On Sausages	Sausages made with Beetroot, Carrot and Horseradish	255	166	8.3	0.7	5.0	4.1	1.5
Like Meat	Pea Based Smoked Sausage	Pea based sausage with smoky taste	180	218	12.0	6.7	0.7	13.0	1.6
Tesco	Plant Chef 6 Cumberland Style Bangers	Pea protein, vegetable suet, mushroom, roasted onion and seasoning filled into plant based casing.	350	174	5.3	2.7	1.4	9.4	1.3
Beyond Meat	Beyond Sausage	Plant-Based Sausage Made with Pea Protein.	200	250	15.8	6.6	0.0	21.0	1.6
Wicked Kitchen	Chorizo Style Bangers	Pea protein, mushroom, rice flour and red pepper blended with seasoning and filled into a starch casing	350	154	4.0	1.7	3.3	11.5	2.7
Gosh!	Smokey Sweet Potato Red Pepper Sausages	A smokey sweet potato and red pepper sausage with chickpea and lentil. Blended and baked with a distinct smokey paprika and cayenne flavour.	270	232	10.0	0.8	5.4	7.1	1.3
Gosh!	Veggie Sausages	A veggie cumberland style sausage with chickpea, butter bean and green lentil. Expertly blended and baked with sage and black pepper.	270	249	12.0	0.8	1.8	7.4	1.2
Linda McCartney	Vegetarian Lincolnshire Sausages	Vegetarian sausages made with rehydrated textured pea protein, onion and sage.	300	209	11.5	1.0	1.1	13.5	1.3
Heck	Beet Goes On 20 Cocktail	Cocktail Sausages made from Beetroot, Carrot, Sunflower Seeds and Horseradish	340	166	8.3	0.7	5.0	4.1	1.5

Asda	Meat Free Sausages	Gluten free sausages with white mushrooms and oyster mushrooms	270	145	9.9	2.8	1.0	5.6	0.8
Gosh!	Veggie Cocktail Sausages with Sage & Black Pepper	Mini veggie sausages made from chickpea, cauliflower & butterbean, simply blended with a Cumberland style seasoning of sage and pepper.	240	241	12.9	1.0	1.3	6.4	1.3
Heck	Thai Style Sausages	Sausages made from Thai Pesto, Sweet Potato and Rice	255	144	4.6	0.5	3.8	3.1	1.1
Heck	Vegfurter	Sausages made from Mushroom, Carrot and Beetroot with Natural Beech Smoked Water	320	160	9.2	0.8	2.6	4.2	1.8
Sainsbury's	Green Supreme Shroomdogs Sausages	Vegan sausages made from spinach, peas & avocado with brown rice, kidney beans, vegan Cheddar style cheese simply seasoned with herbs.	500	116	2.5	1.7	1.2	5.4	1.1
Category 6 - Fish	substitutes (n=9)								
Linda McCartney	Vegetarian Fishcake	Vegetarian Fish - Style Cakes made with Rehydrated Textured Soya and Wheat Protein, Lemongrass and Chilli; in a Crispy Lemon and Parsley Breadcrumb Coating.	208	195	9.0	0.7	0.4	12.6	0.8
Squeaky Bean	Fishless Fingers	Flavoured vegan sticks made from wheat protein with added iron and vitamin B12.	216	245	9.3	1.1	1.4	13.0	1.6
Plant Pioneers	Fishless Fingers	6 vegan fingers coated and fried made with mushrooms, wheat gluten, coconut milk and natural flavourings	210	203	9.4	0.8	2.1	8.9	0.9
Tesco	Plant Chef Battered Fish Free Fillets	Soy protein formed fillets coated in tempura batter	250	223	7.1	0.8	0.9	13.3	1.3
Fry's	Fish-Style Fillets	Vegan tempura battered vegetable protein pieces with fish-style flavour.	240	256	20.0	3.0	0.3	8.2	1.7
Quorn	Vegan Fishless Fingers	A real family favourite. Quorn vegan fishless fingers are coated in a crispy crumb.	200	214	7.8	0.6	1.6	4.5	1.3

Quorn	Fishless Fillets Salt And Vinegar	Quorn fishless fillets are coated in a delicious crisp batter.	200	209	8.6	1.2	1.5	4.5	1.2
Quorn	Breaded Fishless Fillets	Fish free savoury flavour fillets, made with mycoprotein, coated in a lemon batter and pepper breadcrumb	200	181	2.8	0.4	0.0	4.5	1.1
Gardein	Golden Fishless Fillets	Golden Fishless Fillets	288	188	11.0	0.5	0.0	9.4	0.9
Category 7 - Meat	substitute ham, bacon a	nd deli slices (n=14)							
Quorn	Vegan Chicken Free Slices	Meat free chicken flavour deli slices, made with mycoprotein.	100	94	2.3	0.6	0.5	11.0	1.3
Quorn	Meat Free Bacon Style Rashers	Meat free bacon flavour deli slices, made with mycoprotein	120	128	5.2	0.5	0.3	13.9	1.2
Quorn	Vegetarian Chicken Slices	Meat free savoury deli slices made with mycoprotein.	170	115	2.6	1.3	0.5	16.0	0.9
Quorn	Meat Free Bacon Slices	Meat free bacon flavour slices, made with mycoprotein.	150	214	15.7	1.1	2.6	10.1	1.6
Quorn	Vegetarian Ham Slices	Meat free ham flavour deli slices made with mycoprotein	170	123	2.7	1.2	0.8	17.0	0.9
Quorn	Meat Free Deli Turkey	Meat free turkey and sage flavour deli slices, made with mycoprotein	170	128	2.3	0.6	0.6	16.0	1.3
Vivera	Veggie Bacon Pieces	Plant-based pieces made from rehydrated soya protein.	175	95	0.5	0.1	0.4	15.0	2.9
Quorn	Spinach And Red Pepper Slices	Meat free savoury flavour slices, made with mycoprotein, with spinach and red peppers pieces	100	141	5.9	1.4	2.3	15.0	1.1
Tofurky	Hickory Smoke Flavour Deli Slices	Hickory Smoked Flavour Turkey Style Tofu & Wheat Gluten Slice	156	206	6.7	0.7	1.4	27.0	1.7
Tofurky	Plant-Based Deli Slices Smoked Ham Style	Smoked Ham Style Tofu & Wheat Gluten Slices	156	193	6.9	0.7	1.8	25.0	1.5

Tofurky	Oven Roasted Deli Slices	Oven Roasted Turkey Style Tofu & Wheat Gluten Slices	156	193	6.3	0.6	1.3	25.0	1.7
Quorn	Vegan Smoky Ham Free Slice	Meat free smoked ham flavour deli slices made with mycoprotein.	100	101	2.5	0.6	0.5	14.0	1.7
Plant Pioneers	Smoky Vacon Rashers	vegan rashers made with wheat gluten, coconut milk and natural flavourings in a smoked paprika coating	88	347	21.1	6.1	3.8	24.5	1.1
Quorn	Vegetarian Pepperoni	Meat free pepperoni flavour deli slices, made with mycoprotein	100	211	14.0	4.8	3.1	11.0	1.0
Category 8 - Past	ry-based meat-substitute	s including sausage rolls and pies (n=42)							
Quorn	Meat Free Sausage Roll	Meat free sausage roll made with mycoprotein wrapped in flakey pastry	130	225	9.3	3.7	2.4	12.3	1.0
Quorn	Sausage Rolls	Meat free savoury filling, made with mycoprotein and onion, wrapped in puff pastry	210	259	12.5	5.3	2.7	10.1	0.9
Quorn	Vegetarian Steak Slice	Vegetarian Steak Slices made with Mycoprotein™, in puff pastry	167	268	14.0	6.7	2.0	6.1	0.8
Quorn	Pasties	Meat free Pasties made with Mycoprotein™, potato, onion & swede in puff pastry	300	213	10.0	5.0	5.5	6.9	0.6
Quorn	Vegetarian Steak & gravy Pies	Meat free Steak & Gravy Pies made with Mycoprotein™	400	216	9.1	4.8	7.0	6.1	0.7
Quorn	Chicken & Bacon Lattice	Meat free chicken flavour pieces and meat free bacon flavour lardons, made with Mycoprotein™, in a creamy cheese and white wine sauce, wrapped in puff pastry topped with a parsley cheese crumb.	300	257	12.8	7.1	2.1	8.0	0.7
Green Isle	Vegan Sausage Rolls	Seasoned rehydrated soya protein and rehydrated wheat protein wrapped in puff pastry.	600	341	20.0	9.4	2.4	11.0	0.9
Fry's	Sausage Roll	Sausage roll	80	346	18.5	7.5	1.3	13.4	2.3

Fry's	Mini Sausage Rolls	A sausage filling made from vegetable proteins encased in a puff pastry.	180	325	16.3	7.6	3.0	12.0	1.5
Fry's	Steak Style & Ale Pie	A warm, hearty pie filled with steak-style meat free pieces, mouthwatering gravy, vegan tribute ale and fragrant herbs and spice.	245	233	12.4	5.2	2.4	4.8	0.6
Fry's	Sausage Rolls	Sausage Rolls	160	275	12.9	5.9	2.8	11.5	1.8
Fry's	Meat Free Pepper Steak Style Pie	Pepper Steak-Style Pie, Meat free, Nature's plant proteins	160	217	9.2	4.5	3.2	7.1	1.5
Birds Eye	Meat Free Sausage Rolls	All natural plant power. We pick selected pears from fields. Take all the protein from the peas.	360	237	13.0	6.4	0.9	8.0	1.1
Linda McCartney	Vegetable Sausage Rolls	Deliciously comforting, Vegetarian Society approved	342	287	16.2	7.3	2.1	10.9	0.9
Linda McCartney	Cheese Leek & Red Onion Plaits	Deliciously comforting, Vegetarian Society approved	340	290	17.7	9.5	2.2	6.5	1.1
Asda	Meat Free Sausage Rolls	Seasoned to perfection and wrapped in our flaky puff pastry.	440	293	15.0	6.7	2.3	12.0	0.8
Asda	Meat Free Jumbo Sausage Roll	Seasoned pea protein and vegetable oil in puff pastry	120	297	16.0	5.9	1.5	8.8	0.9
Asda	Meat Free 50 Mini Sausage Rolls	Seasoned rehydrated textured soya protein and rehydrated textured wheat protein pieces wrapped in puff pastry	800	317	14.0	7.9	2.1	12.0	0.8
Asda	Mushroom & Chicken Style Pies	Mushroom and rehydrated wheat protein in a cauliflower, coconut cream and white wine sauce, with a puff pastry lid and a shortcrust pastry base	360	219	10.0	5.1	2.2	7.3	0.6
Asda	Vegan Pasty	Potato, swede and onion in puff pastry	135	260	14.0	7.0	2.6	6.9	0.8
Ginsters	Vegan Quorn Roll	Vegan Quorn® blended with herbs and spices, wrapped in a light puff pastry.	100	299	18.8	9.9	1.2	8.2	1.1

Wall's	Tasty Vegan Jumbo Roll	Puff pastry filled with seasoned Hooba™ meat free mince.	120	242	11.0	5.0	1.8	6.1	1.1
Fry's	Spicy 3 Bean Pasty	Spicy 3 Bean Pasty	200	267	13.0	6.2	1.9	6.0	0.3
Fry's	Mixed Mushroom Country-Style Pie	A hearty pie packed full of Chestnut, Granulatus, Oyster, Shitake and Porcini mushrooms, in a rich and creamy mushroom sauce	266	190	8.7	3.6	2.3	4.6	1.0
Pieminister Kevin	Chesnut Mushroom, Tomato & Quinoa Pie with Baby Onions	Chesnut Mushroom, Tomato & Quinoa Pie with Baby Onions	270	201	9.5	3.2	2.8	4.8	0.7
Plant Pioneers	Meat Free Mini Sausage Rolls	Vegan Cumberland sausage-style filling made with rehydrated textured soya protein; wrapped in puff pastry	494	307	16.2	6.5	1.7	12.1	1.0
Plant Pioneers	Vegan Snack Rolls	4 puff pastry rolls filled with seasoned mushroom mince	120	279	13.4	6.2	2.1	6.3	1.2
Sainsburys	Vegetarian Goat Cheese and Caramelised Onion Pies	Creamy goats' cheese with sweet caramelised onion and chunks of butternut squash in flaky puff pastry	370	251	13.0	7.0	3.9	6.4	0.7
Birds Eye	Meat Free Chicken Pies	Shortcrust pastry filled with pea protein and vegetables in gravy.	620	258	13.0	4.7	1.3	7.3	0.7
Fray Bentos	Vegan Steak & Kidney Bean	Vegan steak pieces (8%) and kidney beans (3.5%) in gravy, topped with pastry	425	148	7.2	3.9	0.6	4.6	0.8
Fry's	Vegan Vegetable Curry Pie	Vegetable Curry Pie	160	225	10.5	4.9	3.0	5.6	1.5

Fry's	Meat Free 2 Country Mushroom Pies	These delicious pies are filled with fresh mushrooms and chicken-style pieces encased in a crisp golden pastry.	350	213	9.9	5.7	3.4	5.4	0.8
Fry's	Meat Free Chicken Style Mushroom Pie	Chicken-Style Country Mushroom Pie	160	208	9.7	3.9	2.8	4.7	1.1
Ginsters	Vegan Quorn Pasty	Marinated Quorn® pieces with potato, onion and swede, distinctly seasoned with pepper, wrapped in light puff pastry.	180	242	13.2	6.4	2.0	6.4	0.7
Ginsters	Vegan Moroccan Vegetable Pasty	Butternut squash, chickpeas, apricot, dates, red piquanté pepper in a red Harissa and Moroccan Chermoula sauce with potato, onion, tomato and spring onion, wrapped in light puff pastry.	180	227	12.5	6.1	4.7	3.8	0.9
Linda McCartney	Vegetarian Deep Dish Country Pies	Vegetarian Pie Made from a Shortcrust Pastry Base, Filled with Rehydrated Textured Soya Protein in a Rich Onion and Beef - Style Gravy; Topped with a Puff Pastry Lid.	380	245	13.5	5.9	2.3	5.6	1.0
Tesco	Vegetarian Mushroom & Camembert Pies	Shortcrust pastry filled with mushrooms and Camembert full fat soft cheese in a cream sauce, topped with a puff pastry lid.	360	268	16.2	7.9	1.4	5.6	0.4
Tesco	Vegetable & Haricot Bean Cobbler	Carrot, parsnip, haricot beans, pea and spinach stew topped with a herby suet dumpling.	200	128	4.9	2.3	4.5	3.0	0.7
Wicked Kitchen	Curried Cauliflower Pasty	Cauliflower florets roasted with turmeric with spicy root vegetables in a flaky puff pastry pasty topped with a crunchy onion seed and parsley crumb.	150	241	13.0	6.5	3.4	4.1	0.7

Wicked Kitchen	All The Rage Rolls	Seasoned Soya protein with Kale and white mushrooms in puff pastry, topped with black onion seeds	120	311	17.6	6.0	1.8	13.3	0.9
Asda	Duckless Spring Rolls	Crisp pastry rolls filled with vegan duck style pieces with carrot and water chestnut in a hoisin style sauce.	200	267	14.0	2.1	5.1	7.2	0.7
Aunt Bessie's	Meat Free Toad in the Hole	Meat Free Lincolnshire Style Sausages in a Yorkshire Pudding Batter.	190	178	7.6	0.7	1.5	9.4	0.7
Category 9 - Misc	ellaneous meat-style sub	stitutes e.g. kebab, melts, duck (n=20)							
Plant Power	Tempeh Spare Ribz Sticky BBQ Sauce	BBQ friendly	280	159	5.8	1.4	11.0	10.5	1.4
Vivera	Veggie Greek Kebab	Plant-based slices made from rehydrated soya protein seasoned with kebab herb.	175	167	8.8	1.0	1.0	14.0	1.1
Quorn	Meat Free Picnic Egg	Meat free picnic eggs made with mycoprotein with a herb and savoury flavour chopped free range egg filling and breadcrumb coating.	180	250	12.6	1.4	1.8	13.6	1.1
Oumph!	Pulled Oumph!	Chunks of extruded soya protein in BBQ sauce, deep frozen	280	120	0.7	0.1	11.0	14.0	1.6
Oumph!	The Chunk	Chunks of extruded soya protein, plain, deep frozen.	280	82	0.4	0.0	0.0	17.0	0.6
Oumph!	Sticky Smokehouse Oumph	Fillets from soyaprotein with BBQ glaze.	280	123	1.4	0.4	9.0	15.0	1.0
Linda McCartney	Shredded Hoisin Duck	Seasoned, shredded vegetarian hoisin duck made with rehydrated textured soya and wheat protein.	300	190	7.7	0.7	2.4	22.1	1.7
Oumph!	Kebab Spiced	Strips of extruded soya protein with kebab spice, deep frozen.	280	129	5.3	0.5	1.7	15.0	1.7
Beanit	Pan-Fry Protein Pieces	Cooked Pea Protein and Fava Bean Pieces	175	229	9.6	0.9	0.7	30.6	1.1
Linda McCartney	Vegetarian Beef Roast with Red Wine & Shallot Glaze	Succulent Vegetarian Beef-Flavour Roast Made with Rehydrated Textured Soya Protein and Onion; Finished with a Red Wine and Shallot Glaze.	500	126	3.3	2.0	1.9	15.0	1.4

Linda McCartney	Vegetarian Pulled Pork	Seasoned vegetarian pulled pork made with rehydrated textured soya and wheat protein, with a subtle barbecue flavour.	300	189	8.6	0.9	0.3	19.5	1.7
Linda McCartney	Vegetarian Hoisin Duck Kit	A meal kit of seasoned, shredded vegetarian hoisin duck made with rehydrated textured soya and wheat protein with a sachet of hoisin sauce and 10 Chinesestyle pancakes.	350	240	7.6	2.1	5.5	14.8	1.8
Vivera	Plant Shawarma Kebab	Plant-based slices made from rehydrated soya protein and seasoned with shawarma herbs.	175	150	6.9	0.8	0.4	15.0	1.1
Cauldron	Teriyaki Tofu	Cauldron vegan smoked tofu is also organic. It is fuss- free and ready to go for those quick and easy meals. Ready to eat or enjoy hot.	160	186	8.8	1.1	0.7	18.0	0.4
Linda McCartney	Vegetarian Pork Bao Bun Meal Kit	A Meal Kit of Seasoned Vegetarian Pulled Pork made with Rehydrated Textured Soya and Wheat Protein with 4 Bao Buns and a Sachet of Vegan Sriracha Mayonnaise.	270	287	12.7	1.5	4.9	15.6	1.4
Clonakilty	Veggie pudding	Clonakility vegetable pudding is a delicious combination of oats, vegetables and spices.	200	162	2.2	0.5	2.4	5.0	0.8
Like Meat	Soya Based Organic Kebab	Soya based chunks with kebab-style marinade	180	130	4.5	0.5	0.3	18.0	1.6
The Vegetable Butcher	Vegan Good Karma Shawarma	high protein soy-based strips	160	148	4.2	0.5	0.7	21.3	1.8
Oumph	Vegan Pulled Kebab	Chunks of extruded soya protein in BBQ sauce, deep frozen.	280	120	0.7	0.1	11.0	14.0	1.6
Gardein	Sweet and Sour Porkless Bites	Meatless pieces in an authentic Asian sauce. Add veggies, rice and chopsticks!	300	160	3.5	0.0	14.0	12.0	1.4

Category 10 - Miscellaneous vegetarian substitutes e.g. spinach bites, cheese grills/melts, veg fingers (n=34)

Asda	Vegetarian & Vegan Jackfruit Thai Red Curry	Jackfruit in a Thai red curry sauce made with coconut milk, lemongrass, lime and red chillies with red peppers and water chestnuts	392	56	2.9	0.9	3.0	0.9	0.4
Plant Pioneers	Sweet & Smoky BBQ Jackfruit	Sweet & Smoky BBQ Jackfruit	150	84	0.5	0.1	13.4	1.3	0.6
Plant Pioneers	Peking No Duck Jackfruit	Peking Style Jackfruit	150	126	3.0	0.5	18.9	1.6	0.6
Plant Pioneers	Spicy No Lamb Shawarma Jackfruit	Spiced Jackfruit	150	87	3.1	0.3	7.0	1.8	0.5
Plant Pioneers	Mexican Style Jackfruit	Mexican Jackfruit	150	70	2.4	0.2	6.6	1.9	0.8
Tesco	Vegetarian Bacon Mac & Cheese Melts	Vegetarian bacon made with wheat gluten and soya protein with macaroni and cheese coated in breadcrumbs.	280	257	12.7	4.7	3.1	8.0	0.8
Asda	Vegetable Dippers	A blend of sweetcorn, peas, carrots, potatoes and onions, wrapped in our golden crumb	300	226	11.0	1.8	2.4	3.4	0.4
Tesco	Meat Free Mushroom Risotto Bakes	A blend of mushrooms, white rice, cheddar cheese and soft cheese coated in a crispy crumb.	280	198	8.5	2.3	2.1	5.4	1.1
Strong Roots	Spinach Bites	A crisp spinach bite coated in a carrot and vegetable crumb.	450	218	12.1	1.1	7.4	3.4	0.8
Tesco	Plant Chef Corn Fritters	Courgette and butternut squash with sweetcorn, peppers and spring onions.	280	173	8.2	0.7	1.1	3.0	0.5
Tesco	Vegetarian Cauliflower Cheese Grills	Frozen grills made with cauliflower, mature cheddar & soft cheese, leeks and spring onion in crunchy breadcrumbs.	397	246	14.3	3.3	1.7	5.6	1.0

Strong Roots	Broccoli Bites	Broccoli & Purple Carrot Bites	450	173	6.9	0.7	1.4	2.3	0.7
Tesco	Vegetarian Mozzerella Roast Vegetable and Pesto Melts	Chargrilled peppers and rice with a melting middle in a golden crumb.	280	255	15.6	3.8	4.5	7.1	0.8
Birds Eye	Vegetable Fingers	All natural plant power our veggie fingers are bursting with veggies that are picked and frozen within hours to naturally retain nature's goodness.	284	188	8.1	0.6	2.5	3.4	1.0
Gosh!	Sweet Potato Pakora	Chilli rating - Medium Spiced - 2, Free from egg, dairy, nut & soya, Vegetarian Society Approved	200	198	10.0	0.8	6.8	6.0	0.9
Tesco	Vegetarian Mushroom Rice Bakes	A blend of mushrooms, white rice, Cheddar cheese and soft cheese coated in a crispy crumb.	280	198	8.5	2.3	2.1	5.4	1.1
Tesco	Plant Chef Veg Fingers	Seasoned garden vegetables in a crispy golden crumb.	448	206	8.6	0.9	0.5	4.1	0.8
Little Roots	Crunchy Corn And Carrot Chunks	Little bites for family, 100% natural ingredients, 3 veggies in every bite, GMO free, Suitable for vegans	200	215	10.0	1.1	3.1	3.3	0.5
Tesco	Vegetarian Cheese & Onion Crisp Bakes	Frozen cheese & onion crispbakes – onion, cheddar & mozzarella cheese, spring onion and potato in breadcrumbs.	240	201	10.9	2.9	1.2	5.4	1.1
Asda	Mushroom & Spinach Cheese Melts	Mushroom, spinach and rice, topped with mature Cheddar cheese and coated in breadcrumbs	260	217	11.0	1.9	1.5	8.3	0.4
Asda	Pesto & Mozzarella Melts	Peppers, tomatoes, courgettes, mozzarella and full fat soft cheese with basil pesto coated in breadcrumbs	280	284	16.0	3.9	2.7	7.2	0.9
Asda	Cauliflower Cheese Crispy Grills	Seasoned cauliflower, potato, onions and leeks with mature Cheddar and medium fat soft cheeses coated in breadcrumbs	397	208	11.0	2.3	2.7	4.8	0.9

Asda	Katsu Curry Melts	A blend of rice, red peppers, coconut and a deliciously	280	180	9.5	1.8	5.3	3.6	0.9
		spiced curry sauce, wrapped in our golden crumb							
Asda	Cheese & Spring Onion Bakes	Potato mixed with mature Cheddar cheese, onion and spring onion wrapped in a gluten free crumb	230	238	14.0	4.9	1.3	6.3	0.7
Asda	Plant Based 16 Vegan Vegetable Fingers	Carrots, sweetcorn, peas, onions and potatoes with seasoning coated in breadcrumbs	452	234	8.8	1.0	3.9	4.4	0.8
Asda	Cheese & Spring Onion Crispbakes	Potato, spring onion and onion with mozzarella, mature Cheddar and medium fat soft cheeses coated in breadcrumbs	280	178	8.5	3.0	2.5	5.2	0.8
Gosh!	Sweet Pumpkin & Chilli Bites	Chunky chickpea, pumpkin and chilli bites - simply blended with herbs, spices and baked	200	239	12.2	0.9	4.4	7.2	1.3
Gosh!	Tuscan Vegetable Bites	Butternut, spinach and carrot bites - simply blended with Italian herbs and baked	200	126	2.3	1.0	1.0	3.0	1.1
GoodLife	Mushroom & Spinach Kiev with a Creamy Garlic & Cheese Sauce	Formed mushroom and spinach, coated in a seeded breadcrumb.	250	248	12.4	2.8	1.9	6.9	1.2
Sainsbury's	Cheese & Spring Onion Crispbakes	Potato, spring onions & cheese coated in breadcrumbs with potato, mature Cheddar & mozzarella cheese	454	216	9.5	2.7	1.5	6.4	0.8
Sainsbury's	Cauliflower Cheese Grills	Cauliflower, cheese and leeks coated in crisp breadcrumbs with mature Cheddar cheese and leeks	397	231	11.9	2.6	1.4	4.7	0.6
Sainsbury's	Mushroom & Spinach Crispbakes	Mushrooms, spinach, mature Cheddar cheese and soft cheese mixed with rice, coated in breadcrumbs	454	215	8.3	2.2	2.3	5.3	0.8
Sainsbury's	Green Veg & Risotto Balls	Vegetables and Arborio rice encasing a mozzarella cheese centre, coated in crispy lemon and basil breadcrumb	300	252	12.7	3.9	1.0	6.8	1.0

Sainsbury's	Vegetable Fingers	16 Vegetable fingers made with mixed vegetables, seasoned and coated in breadcrumbs	452	243	10.7	1.2	2.7	4.6	0.5
Category 11 - Fala	fel and other lentil/pulse/	nut based meat substitutes (n=29)							
Fiid	Italian Sundried Tomato Lentil Ragu	Italian Sundried Tomato Lentil Ragu	400	54	0.4	0.2	2.7	3.0	0.5
Fiid	Smokey Mexican Black Bean Chilli	Smoky mexican black bean chilli	400	89	0.5	0.2	2.6	4.7	0.5
Fiid	Hearty Morocan Chickpea Tagine	Hearty moroccan chickpea tagine	400	60	0.5	0.1	3.7	3.0	0.5
Branston	Baked Beans with Vegetarian Sausages in Tomato Sauce	Baked Beans and Vegetarian Sausages in Tomato Sauce	405	109	2.5	0.3	4.1	7.2	0.5
Me Too	Original Falafel	Falafels made from ground chickpeas, herbs & spices	500	232	9.8	0.8	4.0	9.4	1.5
Vegafit	Falafel	Vegafit 10 Falafel 200g	200	206	10.0	1.2	1.5	7.5	1.6
Sainsbury's	Moroccan Vegbab	Vegan kebabs made from a blend of chickpeas, apricots and raisins with Moroccan Spices	264	172	7.6	1.9	5.5	5.4	1.0
Cauldron	Middle Eastern Falafels	Falafels made with chickpeas, onion and coriander.	200	268	14.0	1.7	4.0	7.5	0.4
Tesco	Sweet potato falafel	A spiced blend of sweet potato, carrot, chickpeas and dried apricots.	264	148	4.9	0.5	6.9	3.6	0.9
Gosh!	Mediterianean Falafel	Falafel made with chunky chickpeas and onion - simply blended with mediterranean spices and baked .	200	239	11.0	0.8	0.7	9.7	1.4
Gosh!	Moroccan Falafel	Falafel made with chickpeas, red pepper, apricots and dates - simply blended with moroccan spices and baked.	200	225	9.5	0.7	6.2	7.1	1.2
Gosh!	Moroccan Spiced Bakes	Moroccan spiced bakes made with chickpea, peppers, broad beans, apricot and harissa - blended and baked.	250	171	5.0	0.6	3.2	5.3	1.1

Gosh!	Spinach and pine nut bites	Chunky chickpea, carrot, spinach and pine nut bites - simply blended with herbs and spices and baked.	200	244	13.0	1.0	1.8	8.9	1.3
Cauldron	Koftas	Koftas made with lentils, spinach, carrots and a mango chutney with mild indian spices.	200	126	4.2	0.7	4.5	3.7	0.6
Tesco	Plant Chef Nut Cutlets	Peanut, hazelnut and almond mixed with vegetables, seasoning and breadcrumbs.	350	225	13.0	1.4	8.2	5.2	0.5
GoodLife	Falafel Lemon, Cumin & Coriander	Chickpea and onion balls with cumin, coriander, chilli and lemon juice.	280	207	10.4	0.7	3.0	7.9	1.1
Little Roots	Pea And Lemon Mini's	100% natural ingredients, Suitable for vegans	200	226	9.4	1.0	2.5	6.1	0.7
Me Too	Spinach & Kale Falafel	Falafels made from ground chickpeas Now with added Spinach & Kale	500	212	11.7	0.9	1.9	8.0	2.2
Asda	Plant Based 4 Vegan Nut Cutlets	Peanuts, hazelnuts and almonds mixed with vegetables, seasoning and breadcrumbs	350	336	22.0	2.9	5.9	9.1	0.7
Asda	Vegan Beetroot & Quinoa Falafels	Gluten free falafels with beetroot, red onions, yellow split peas, green lentils, brown rice, quinoa and caramelised red onions	240	150	2.0	0.3	6.2	4.2	0.9
Asda	Spicy Bean Bakes	Spicy mixed beans, peppers and sweet potato wrapped in a crispy gluten and milk free crumb	230	189	8.3	0.8	2.3	4.5	0.6
Asda	Sweet potato falafels	Sweet potato, chickpea and onion falafels with spices	220	247	9.1	0.7	11.0	10.0	0.4
Asda	Moroccan style falafels	Falafel with chickpea, red pepper, onion and spices	220	265	13.0	1.1	2.7	12.0	0.8
Gosh!	original falafel	Falafel made with chunky chickpeas and garlic - simply blended with Mediterranean spices and baked	300	257	13.0	0.9	2.2	9.6	1.2
Gosh!	Broad Bean & Quinoa Bites	Chunky chickpea, broad bean and quinoa bites - simply blended with parsley and mint and baked	200	231	11.0	0.8	2.2	9.2	1.3
Cauldron	Moroccan Falafels	Falafels made from chickpeas & onion with paprika, cinnamon & ginger	180	239	6.5	0.8	6.5	6.0	0.8

#### Vegetarian meat substitutes

Sainsbury's	Beetroot, Quinoa & Kale Falafels	Beetroot, quinoa and kale chickpea falafels with spices	160	231	8.4	0.7	4.0	9.2	0.6
Sainsbury's	Falafels with Chickpeas, Coriander & Cumin	Falafels made with chickpeas and onion, flavoured with coriander and spices	180	258	9.1	0.7	5.9	13.1	0.6
Sainsbury's	Red Pepper & Chipotle Falafels	Red pepper, chickpea and onion falafels with spices	160	219	7.1	0.8	3.7	10.5	0.8

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