

**APPENDICES**

Appendix 1

Packaging details for pilot study products

Sample ID	Full product description	Product type	condition on purchase	storage conditions on purchase	Outlet type	Species	Ingredients	Country of origin
DPS 1	Minced Beef Bolognese	canned	cooked	ambient	small retail outlet	Beef	Water, Beef (30%), Mixed Peppers, Chopped Tomatoes, Tomato Puree, Modified Maize Starch, Wheat flour, onions, Salt, Sugar, Paprika, Garlic Powder, Herbs, Black Pepper, Chilli Powder.	
DPS 2	10 Pork Sausages	sausages	raw	frozen	small retail outlet	Pork	Pork (42%), Water, Rusk (wheat flour, salt, raising agent: ammonium Carbonates), pork rind, salt, dextrose, potato starch, stabilisers: diphosphates, preservative: sodium sulphite, spice extracts (pepper, nutmeg, coriander), herb extracts (sage, thyme), colour: cochineal. Filled into beef collagen casings (collagen, water, cellulose).	Produced in the UK
DPS 3	4 Beef Quarter Pounders	raw burger	raw	refrigerated	small retail outlet	Beef	British Beef (94%), Seasoning [Rusk (Wheat Flour, Salt, Raising Agent (Ammonium Carbonate)), Salt, Dextrose, Preservative (Sodium Metabisulphate), Spices, Yeast Extract, Onion Powder, Herbs].	UK
DPS 4	Beef Lasagne	ready meal	cooked	ambient	small retail outlet	Beef	Bolognese sauce: 64% of which water, tomatoes 22%, minced beef 19% (beef, chicory fibres, breadcrumbs, salt, herbs & spices), tomato concentrate 13%, onions 6%, cream, carrots 2%, celery 2%, modified starch, salt, sugar, herbs & spices, lemon juice. Béchamel sauce 28%, water milk powder, cream, modified starch, flavouring (contains soya), wheat flour, salt, herbs & spices. Pasta 8%, durum wheat, water.	EU
DPS 5	2 Flame Grilled Cheese Burgers with Relish in Sesame Seeded Buns	burger	cooked	frozen	small retail outlet	Beef	Cooked beef burger (41%): Beef (69%), beef fat, water, rusk, seasoning (barley flour, salt, dextrose, diphosphates, preservative, sodium metabisulphite, flavouring, pepper extract), soya protein isolate, onions, salt.	Not declared

Sample ID	Full product description	Product type	condition on purchase	storage conditions on purchase	Outlet type	Species	Ingredients	Country of origin
DPS 6	Beef Mince	minced meat	raw	frozen	retailer	Beef	Beef (100 %)	Origin: Germany; Slaughter: Germany; Cut in: Germany; Minced in: UK
DPS 7	4 100% British Beef Quarter Pounders	burger	raw	frozen	retailer	Beef	Beef (98%), Seasoning. Seasoning contains: Rice Flour, Yeast Extract, Salt, Dextrose, Pepper, Pepper Extract, Modified Maize Starch.	Origin of beef: UK
DPS 8	2 Cheese Burgers	burger	cooked	frozen	retailer	Beef	Cooked Beef Burger: Beef (69%), beef fat, water, rusk (wheat flour, salt), wheat flour, onion, seasoning (salt, onion, horseradish powder, black pepper, sugar, garlic powder, rusk (wheat flour, salt), yeast extract, pepper extract.	Packed in the UK
DPS 9	Meatballs	meatballs	cooked	frozen	retailer	Beef	Cooked Meatballs (26%): Beef (72%), Beef Fat, Wheat Flour, Onion, Seasoning (Salt, Spices, Onion Powder, Sugar, Garlic Powder, Wheat Flour, Yeast Extract, Spice Extract), Salt.	Produced and packed in the UK
DPS 10	15 Thick Pork Sausages	sausages	raw	frozen	retailer	Pork	Pork (42%), water, rusk, pork rind, salt, dextrose, potato starch, stabiliser: diphosphates, preservative: sodium sulphite, spice extracts, herb extracts, colour: cochineal. Rusk contains: wheat flour, salt. Filled into beef collagen casings (beef collagen, water, cellulose).	Produced and packed in the UK
DPS 11	Beef Lasagne	ready meal	cooked	frozen	retailer	Beef	Water, white sauce (28%), pasta (17%), minced beef (10%), tomato paste, red cheddar cheese (3%) (cheddar cheese (milk), potato starch, colour: annatto), modified maize starch, rehydrated onion, sugar, salt, garlic puree, basil, dried oregano, black pepper. White sauce contains: water, rapeseed oil, wheat flour, milk proteins, milk sugar, modified maize starch, dried skimmed milk, salt, medium fat hard cheese (milk), nutmeg. Pasta contains: durum wheat semolina, water.	Origin of beef UK. Produced and packed in France

Sample ID	Full product description	Product type	condition on purchase	storage conditions on purchase	Outlet type	Species	Ingredients	Country of origin
DPS 12	Minced Beef	minced meat	raw	frozen	retailer	Beef	100% beef	Slaughtered in IE, origin IE 2007 EC; Minced in the UK
DPS 13	Minced Lamb	minced meat	raw	frozen	retailer	Lamb	lamb	Origin: NZ, UK
DPS 14	Deep Filled Lasagne	ready meal	cooked	frozen	retailer	Not declared	Water; pasta (20%) (durum wheat semolina, water, powdered egg white), meat (19%), tomato sauce (water, tomato concentrate, tomato pulp), rapeseed oil, wheat flour, Emmental cheese (2%), mushrooms, milk protein and lactose, modified corn starch, onions, Cheddar cheese, skimmed milk powder; Bolognese mix (dextrose, salt, flavourings, grilled breadcrumbs, yeast extract, colouring (E150c), flavouring), tomatoes, salt, herbs, cheese, garlic, natural nutmeg flavouring.	Not declared
DPS 15	10 Sandwich Steaks		cooked	frozen	retailer	Beef	Beef, Salt, Wheat Flour (gluten), Dextrose, Emulsifier E450, Antioxidant E330, Preservative E221, Flavourings, Soya.	Not declared
DPS 16	15 Ready Cooked Thick Pork Sausages	sausages	cooked	frozen	retailer	Pork	Pork (46%), water, pork rind, rusk (wheat flour, salt, raising agent: ammonium carbonates), pork fat, wheat starch, salt, whey powder, dextrose, emulsifier: triphosphates; preservatives: sodium sulphites, sodium nitrite, sodium nitrate; natural flavouring, pepper, nutmeg, coriander, basil, colour: carmine. Filled into alginate casing which contains: gelling agent: sodium alginate; thickening agent: cellulose gum; modified potato starch, skimmed milk.	Produced in the UK
DPS 17	Best Scotch Beef 8 beef quarter pounders	burger	raw	frozen	retailer	Beef	Scotch beef (77%), onion (14%), water, rusk, salt, onion powder, yeast extract, spices, rosemary extract.	All scotch beef in this product is guaranteed fully traceable

DPS 18	16 Beef Burgers	burger	raw	frozen	retailer	Beef	Beef (73%), Onion (14%), Water, Wheat Flour, Salt, Potato Starch, Onion Powder, Preservative (Sodium Sulphite), Spice Extracts (contains Celery), Flavourings, Yeast.	Produced in Republic of Ireland
Sample ID	Full product description	Product type	condition on purchase	storage conditions on purchase	Outlet type	Species	Ingredients	Country of origin
DPS 19	Best Scotch Beef Steak mince	minced meat	raw	frozen	retailer	Beef	Scotch beef (100%)	All scotch beef in this product is guaranteed fully traceable. All supplying farms are independently audited under the scotch beef farm assurance scheme.
DPS 20	Minced lamb	minced meat	raw	frozen	retailer	Lamb	Lamb (100%)	Produced in The UK using lamb sourced from New Zealand, Australia and the EU.
DPS 21	Mini Skinless Sausages	sausages	raw	frozen	retailer	Pork	Pork (44%), Water, Rusk (Wheat Flour, Salt, Water), Wheat Starch, Wheat Gluten, Salt, Pork Rind, Dextrose, Stabilisers (E450), Yeast Extract, Preservative (E223), Spice Extracts, Herb Extracts, Antioxidant (E300), Colour (E120).	Produced in Scotland with pork from the UK and EU
DPS 22	Minced Beef	minced meat	raw	frozen	small retail outlet	Beef	Minced Beef 100%	Minced in UK, Origin in UK, SL. in UK
DPS 23	Beef Meatballs	cooked meat based product/burger	cooked	ambient	small retail outlet	Beef	Beef Meatballs (50%), Tomatoes, Water, Onion, Tomato Puree, Corn flour, Garlic, Herbs, Sugar, Sea Salt, Black Pepper. Meatballs contain: Minced Beef (83%), Dried Onion, Basil, Sea Salt, Black Pepper.	UK
DPS 24	British lean minced beef	minced meat	raw	frozen	retailer	Beef	Beef	Minced in UK, Origin in UK,

Sample ID	Full product description	Product type	condition on purchase	storage conditions on purchase	Outlet type	Species	Ingredients	Country of origin
								Slaughtered in UK
DPS 25	8 Beef Burgers with Onion	burger	raw	frozen	retailer	Beef	Beef (83%), Onion (9%), Water, Wheat Flour, Soya Protein Isolate, Salt, Spices (Black Pepper, Coriander, Cinnamon), Herbs (Basil, Marjoram), Rapeseed Oil, Rosemary Extract.	Made in the UK using British Beef
DPS 26	4 Beef quarter Pounders	burger	raw	frozen	retailer	Beef	Beef (99%), Salt, Rosemary Extract.	Made in the UK using British Beef
DPS 27	Frozen 20 value sausages	sausages	raw	frozen	retailer	Pork	Pork (32%), water, pork rind, wheat flour, pork fat, potato starch, salt, stabilisers: diphosphate, triphosphate, dextrose, preservative: sodium metabisulphite, antioxidants: sodium ascorbate, sodium citrates, spice extracts, colour: cochineal. Filled into beef collagen casings.	Produced in the UK
DPS 28	Beef Lasagne	ready meal	cooked	frozen	retailer	Beef	Béchamel sauce (37%), Bolognese sauce (35%), cooked pasta (14%), minced beef (11%), cheddar cheese. Béchamel sauce made using water, corn flour, whey powder (milk), wheat flour, palm oil, skimmed milk powder, salt, whey protein concentrate (milk), ground bay leaf, white pepper, ground nutmeg. Bolognese sauce made using water, onion, tomato, mushroom, tomato puree, corn flour, sugar, wheat flour, salt, garlic puree, basil, pea protein, potato protein, oregano, black pepper. Cooked pasta made using durum wheat semolina, water. Cheddar cheese contains colour (annatto).	Made in Republic of Ireland using British or Irish beef
DPS 29	German Sausages	Jar	cooked	ambient	retailer	Pork	Sausages: (Pork (63%), Water, Pork Fat, Salt, Spices (Contains Mustard), Milk protein, Hydrolysed Vegetable Protein, Lactose (from milk), Dextrose, Stabiliser: E331, Antioxidant: E300, Preservative: E250, Natural Smoke), Water, Salt	UK

Sample ID	Full product description	Product type	condition on purchase	storage conditions on purchase	Outlet type	Species	Ingredients	Country of origin
DPS 30	Meatball Pasta Bake	ready meal	cooked	refrigerated	small retail outlet	Pork & Beef	Tomato Sauce (47%) )Chopped Tomato (70%), Water, Tomato Purée Triple Concentrate, Olive oil, Onion, Corn Flour, Maize Starch, Sugar, Garlic Purée, Frozen Basil, Salt, Frozen Oregano, Ground Black Pepper), Béchamel Sauce (25%) (Water, Whipping cream (12%), (Milk), Mature Cheddar Cheese (Milk) (Contains Potato Starch), Corn Flour, Skimmed Milk powder, Wheat Flour, Salt), Pork and Beef Meatballs (15%) (Pork (48%) Beef (35%), Diced Onion, Water, Rusk (Wheat Flour, Salt, Yeast), Parsley, Salt, Oregano, Garlic, Black Pepper), Cooked Penne Pasta (13%) (Water, Durum Wheat Semolina, Egg Albumin).	Produced in the UK with beef and pork from the EU
DPS 31	The flame grilled Quarter Pounder	burger	cooked	refrigerated	small retail outlet	Beef	Beef Burger (43%), [Beef (85%), Beef Fat, Textured Soya Protein (6%), Dextrose, Flavour Enhancer: Monosodium Glutamate; Salt, Stabiliser: Triphosphates; Sugar, Egg White Powder, Caramelised Sugar, Colour: Ammonia Caramel; Flavourings, Smoke Flavouring, Hydrolysed Vegetable Protein, Malt Extract, Yeast Extract], <i>Sesame Seed Bun (40%), [Wheat Flour, Water, Vegetable Oil, Yeast, Sesame Seeds, Salt, Sugar, Emulsifiers: Mono- and diacetyl tartaric acid esters of mono- and diglycerides of fatty acids, Mono- and diglycerides of fatty acids; Preservative: Calcium Propionate; Flour Treatment Agent: Ascorbic Acid]</i>	Packed in the UK
DPS 32	Breakfast Franks	frankfurter	cooked	refrigerated	independent retailer	Pork & Chicken	Pork meat 19%, chicken meat 7%, mechanically deboned chicken meat 22%, water, pork fat, pork skins, semolina, potato starch, salt, soy protein, spices (incl. celery), stabiliser: E451, E450, E331, E407, E262, sugar, flavour enhancer: E621, anti-oxidant: E316, E300, preservative: E250.	Poland
DPS 33	Minced Beef	minced meat	raw	frozen	independent retailer	Beef	Beef	Origin: Germany; SL:

Sample ID	Full product description	Product type	condition on purchase	storage conditions on purchase	Outlet type	Species	Ingredients	Country of origin
								Germany; Cut in: Germany; Mince in UK
DPS 34	Scotch beef 4 quarter pounders	burger	raw	Refrigerated	retailer	Beef	Beef (90%), Water, Dehydrated Potato Flour, Rice Flour, Salt, Cracked Black Pepper, Preservative: Sodium Metabisulphite; Emulsifier: Mono- and Diglycerides of Fatty Acids; Dextrose.	Scotch beef - born, raised and slaughtered in Scotland
DPS 35	8 Hot Dogs in Brine	canned	cooked	ambient	retailer	Pork	Pork (80%), Water, Potato Starch, Salt, Smoke Flavouring, Spices, Sugar, Stabiliser: Triphosphates; Antioxidant: Sodium Erythorbate; Rosemary, Preservative: Sodium Nitrite), Brine (Water, Herb Extract, Smoke Flavouring). Filled into Beef Collagen Casings.	Produced in the Netherlands using EU pork
DPS 36	Frankfurters in Brine	Jar	cooked	ambient	retailer	Pork	Pork (85%), Water, Salt, Milk Protein, Spices, Spice Extracts (Coriander Extract, Cardamon Extract, Ginger Extract), Sugar, Yeast Extract, Firming Agent: Potassium Chloride; Stabiliser: Diphosphates; Antioxidant: Ascorbic Acid; Preservative: Sodium Nitrite	Produced in Germany using EU pork
DPS 37	Corned Beef	canned	cooked	ambient	retailer	Beef	Cooked beef, salt, sugar, Preservative: sodium nitrite. Made with 120g of beef per 100g of finished product.	Produced in Brazil using Brazilian beef
DPS 38	Corned Beef	canned	cooked	ambient	retailer	Beef	Beef (Cooked beef, Beef), salt, sugar, Preservative: sodium nitrite. Made with 120g of beef per 100g of finished product.	Product of Brazil
DPS 39	Aberdeen Angus 4 Quarter Pounders	burger	raw	frozen	retailer	Beef	Aberdeen Angus Beef (98%), Wheat Flour, Sea Salt, Salt, Black Pepper, Mustard.	Produced in the UK using British and Irish Beef
DPS 40	Lamb Quarter Pounders with mint seasoning	burger	raw	frozen	retailer	Lamb & Mutton	Lamb (45%), Mutton (42%), water, seasoning (sugar, salt, onion powder, flavourings, herbs (mint, parsley), paprika, garlic powder, antioxidant: ascorbic acid; herb extract), onion, soya protein isolate.	Produced in the UK with British or New Zealand lamb and mutton

DPS 41	Aberdeen Angus Beef Mince	minced meat	raw	frozen	retailer	Beef	Beef mince	Slaughtered in IRL, minced in UK
<b>Sample ID</b>	<b>Full product description</b>	<b>Product type</b>	<b>condition on purchase</b>	<b>storage conditions on purchase</b>	<b>Outlet type</b>	<b>Species</b>	<b>Ingredients</b>	<b>Country of origin</b>
DPS 42	Beef Lasagne	ready meal	cooked	frozen	retailer	Beef	Water, cooked minced beef (15%), cooked pasta (14%) (durum wheat semolina, water), tomatoes, onions, modified maize starch, tomato puree, red wine, mild red cheddar cheese (contains colour: annatto), whey powder, mature white cheddar cheese, seasoning (salt, yeast extract, whey powder, maltodextrin, sugar, onion powder, mushroom powder, turmeric), wheat flour, palm oil, skimmed milk powder, vegetable protein (pea, potato), herbs, garlic puree, medium fat soft cheese, salt, whey protein concentrate, spices.	Produced in Ireland using British and Irish beef
DPS 43	Corned Beef	canned	cooked	ambient	retailer	Beef	Cooked beef (93.5%), Beef (3%), salt, Preservative (sodium nitrite).	Prod. & packed in France
DPS 44	8 beef burgers	burger	raw	frozen	retailer	Beef	Beef (63%), onion (10%), Wheat Flour, water, Beef Fat, Salt, Dextrose, Yeast Extract, Sugar, Onion Extract, Black Pepper.	Produced in the UK using beef from the UK
DPS 45	Aberdeen Angus 4 quarter pounder beef burgers	burger	raw	frozen	retailer	Beef	Beef (99%), sea salt, black pepper.	Produced in the UK using beef from the UK and Ireland.
DPS 46	4 Beef Burgers	burger	raw	frozen	retailer	Beef	Beef (80%), Water, Breadcrumbs (contains Gluten), Textured Soya Protein, Soy Sauce, Egg, Salt.	Prepared in Ireland from cattle born and reared in Ireland.
DPS 47	Mince	minced meat	raw	frozen	retailer	Beef & Pork	Beef (65%), Pork (35%).	Produced using beef from the UK or Ireland. Pork of EU origin.



								Minced in the UK
DPS 48	Corned Beef	canned	cooked	ambient	retailer	Beef	Cooked beef (96%), salt, Sugar, Preservative: sodium nitrite	Brazil
<b>Sample ID</b>	<b>Full product description</b>	<b>Product type</b>	<b>condition on purchase</b>	<b>storage conditions on purchase</b>	<b>Outlet type</b>	<b>Species</b>	<b>Ingredients</b>	<b>Country of origin</b>
DPS 49	Beef and Pork mince	minced meat	raw	frozen	retailer	Beef & Pork	Beef (65%), Pork (35%).	Slaughtered in UK, Minced in UK from British Beef and Pork
DPS 50	Beef Burgers with Onion	burger	raw	frozen	retailer	Beef	British Beef (81%), Onion (10%), Rusk (wheat flour, salt, raising agent (ammonium carbonate)), Seasoning (salt, black pepper, wheat flour, rapeseed oil, acidity regulator (disodium citrate), antioxidant (sodium ascorbate)).	Produced in the UK from British Beef
DPS 51	Original 4 Beef Burgers with Onion	burger	raw	frozen	retailer	Beef	Beef (77%), onion (14%), beef fat, rusk, salt, water, onion powder, yeast extract, spices, natural rosemary flavouring. Rusk: Wheat flour, salt	Beef from European farms that only use responsibly sourced feed.
DPS 52	Beef Lasagne	ready meal	cooked	frozen	retailer	Beef	Meat Sauce (44%) (Water, beef, tomato, onion, tomato puree, beef bouillon (salt, yeast extract, whey powder, maltodextrin, sugar, onion powder, mushroom powder, turmeric), sugar, wheat flour, corn flour, garlic puree, vegetable extract (pea protein, potato), basil, salt, oregano, black pepper), White sauce (40%)(water, milk, fat filled milk powder (whey protein concentrate, skimmed milk solids, palm oil, whey powder), corn flour, single cream, white pepper, nutmeg), pasta (14%) (durum wheat semolina, water), mature cheddar cheese.	Made in the Republic of Ireland using UK or Irish beef
DPS 53	15 Beef meatballs wheat free	meatballs	raw	frozen	retailer	Beef	Beef (90%), Water, Salt, Onion, Dextrose, Pea Fibre, Spice, Preservative (Sodium Metabisulphite), Thermal Process Flavour, Yeast Extract, Antioxidant (Sodium Ascorbate).	Not declared

DPS 54	Lean Minced Beef Steak	minced meat	raw	frozen	retailer	Beef	Minced Beef (100%).	Slaughtered in IRL; Minced in UK
<b>Sample ID</b>	<b>Full product description</b>	<b>Product type</b>	<b>condition on purchase</b>	<b>storage conditions on purchase</b>	<b>Outlet type</b>	<b>Species</b>	<b>Ingredients</b>	<b>Country of origin</b>
DPS 55	8 Economy Burgers	burger	raw	frozen	retailer	Beef	Beef (60%), Water, Onions (9.7%), Fortified Wheat Flour [Wheat Flour (contains gluten), Calcium Carbonate, Iron, Niacin (B3), Thiamin (B1)], Beef Fat, Soya Protein Isolate, Salt, Dextrose, Maltodextrin (contains Wheat and Gluten), Sugar, Flavouring, Spice Extracts, White Pepper, Yeast Extract.	Produced in The UK., beef from the UK
DPS 56	8 mini Doner Kebabs	kebab	raw	frozen	retailer	Lamb	Lamb Doner Kebab (52%) [Lamb (50%), Rusk [Fortified Wheat Flour [Wheat Flour (contains gluten), Calcium Carbonate, Iron, Niacin (B3), Thiamin (B1), Salt], Mutton (10%), Seasoning [Salt, Black pepper, Coriander, Cumin, Coriander Extract, Cumin Extract, Rusk [Fortified Wheat Flour [Wheat Flour (contains gluten), Calcium Carbonate, Iron, Niacin (B3), Thiamin (B1), Salt], Garlic Extract, Chilli Powder, Garlic Powder]].	Produced in UK, Lamb from New Zealand, packed in the UK
DPS 57	12 Lincolnshire Sausages	sausages	raw	frozen	retailer	Pork	Pork (73%), water, Fortified Wheat Flour [Wheat Flour (contains gluten), Calcium Carbonate, Iron, Niacin (B3), Thiamin (B1)], Pork Fat, Herbs (Marjoram, Rosemary, Sage, Parsley), Salt, Spices (White pepper, Coriander, Nutmeg, Ginger, Mace), Dextrose [Dextrose, Preservative (sulphur dioxide)], Antioxidant (Ascorbic Acid), Stabiliser (Triphosphates), Preservative (Sodium Metabisulphite), Pork Rind, Sausage Casing [Beef Protein].	Produced in the UK, pork from the EU, packed in the UK
DPS 58	Beef Lasagne	ready meal	cooked	frozen	retailer	Beef	Bolognese sauce (50%) [tomato puree, water, minced beef (22%), fried onion [onions, sunflower oil], onions, sunflower oil, diced carrots, tomato paste, modified maize starch, salt, sugar, yeast extract, garlic, parsley, flavourings, basil, oregano, black pepper],	Produced in Italy, beef from the EU, packed in Italy

Sample ID	Full product description	Product type	condition on purchase	storage conditions on purchase	Outlet type	Species	Ingredients	Country of origin
							Béchamel sauce (32%) [water, skimmed milk powder, sunflower oil, wheat flour, modified maize starch, cheddar cheese, salt, nutmeg], cooked pasta (15%) [durum wheat semolina, water, wheat gluten], cheddar cheese (2.5%).	
DPS 59	6 British beef quarter pounders	burger	raw	refrigerated	retailer	Beef	Beef (85%), onion (5%), water, rusk (wheat flour, water, raising agent: ammonium hydrogen carbonate), seasoning (salt, sugar, black pepper, preservatives: sodium metabisulphite; antioxidants: ascorbic acid)	Produced in the UK using British beef
DPS 60	Pork Meatballs	meatballs	raw	frozen	retailer	Pork	Pork (83%), Onion, Water, Rusk (Wheat Flour, Salt, Raising Agent: Ammonium Carbonate), Salt, Onion Powder, Stabiliser: Triphosphates; Yeast Extract, Preservative: Sodium Metabisulphite; Spice Extracts: Black Pepper, Nutmeg; Onion Extract.	Produced in the UK using British pork
DPS 61	Beef and Pork Mince	minced meat	raw	frozen	retailer	Beef & Pork	Beef (65%), Pork (35%).	Slaughtered in UK, Minced in UK
DPS 62	British 4 Quarter Pounder Beef Burgers	burger	raw	frozen	retailer	Beef	Beef (81%), Onion (9%), Water, Breadcrumb, Black Pepper, salt. Breadcrumb contains: Wheat Flour, Water, Yeast, Salt.	Produced from British Beef; Produced in the UK
DPS 63	Irish recipe 16 Thick Freshly Frozen Sausages	sausages	raw	frozen	retailer	Pork	Pork (42%), water, pork fat (10%), rusk (wheat), potato starch, vegetable protein. Less than 2%: salt, flavourings, stabilisers; diphosphates, guar gum; sodium alginate, antioxidants: E300 & E307; preservative: sodium metabisulphite, colour: cochineal. Casing made from beef collagen.	Meat from The UK and the EU
DPS 64	Beef Meatballs "Chinese Style"	meatballs	cooked	frozen	independent retailer	Beef	Beef 59%, water, beef tendon 8%, potato starch, salt, sugar, flavour enhancer E621, wheat gluten, sodium lactate, raising agent (E450i, E500i, wheat flour), nuoc-mam (fish sauce: anchovy extract 77%, salt 20%, sugar 3%).	France
DPS 65	British Minced beef in a rich	canned	cooked	ambient	retailer	Beef	Minced Beef (75%), water, onions (4%), Beef stock (2%), corn flour, Tomato Puree, Wheat flour, sugar, salt, stabiliser: E472e, Barley Malt	Made in the UK, assured beef from

	gravy made with beef stock and onions						Extract, Ground Black Pepper. Beef stock contains water, Beef Extract, Vegetable Concentrates (Tomatoes, Carrots, Onions, Garlic), Herbs (Parsley, Rosemary, Thyme), Ground Black Pepper	farms in the UK.
Sample ID	Full product description	Product type	condition on purchase	storage conditions on purchase	Outlet type	Species	Ingredients	Country of origin
DPS 66	British outdoor bred pork mince	minced meat	raw	refrigerated	retailer	Pork	pork	Produced in the UK, assured pork from farms in the UK.
DPS 67	British beef 10% fat beef mince	minced meat	raw	refrigerated	retailer	Beef	beef (Collagen/meat protein ratio under 15%. Percentage of fat content under 10%)	Produced in the UK, assured beef from farms in the UK.
DPS 68	Steak burgers	burger	raw	refrigerated	retailer	Beef	British beef (95%), gluten free crumb, sea salt, preservative: E223 (sulphites). Gluten free crumb contains water, potato flour, rice flour, salt, Emulsifier: E471, dextrose.	Made in the UK, assured beef from farms in the UK.
DPS 69	Beef Lasagne	ready meal	cooked	refrigerated	retailer	Beef	Beef (27%), Whole Milk, Tomatoes (19%), Cooked Free Range Egg Pasta (17%), Water, Onions, Rapeseed Oil, Medium Fat Hard Cheese (1 %), Mature Cheddar Cheese (1 %), Tomato Purée, Corn flour, Wheat flour, Regato Cheese (contains Potato Starch), Carrots, Celery, Salt, Garlic Purée, Oregano, Cracked Black Pepper, Rosemary, Ground Nutmeg, Ground White Pepper, Ground Bay Leaves. Cooked Free Range Egg Pasta contains Durum Wheat Semolina, Water, Pasteurised Free Range Egg.	Made in the UK, assured beef from farms in the UK.
DPS 70	Beef Kebab	kebab	raw	frozen	independent retailer	Beef	67% beef, water, breadcrumbs (wheat flour, salt, yeast, barley malt extract), beef fat, wheat starch, salt, herbs and spices, dried vegetables (garlic, onion, parsley, paprika), vegetable oil, stabiliser: E451, flavor enhancer: E621, antioxidant: E316.	Not declared
DPS 71	10 Premium Lamb Kebab	kebab	cooked	frozen	independent retailer	Mutton	Mutton meat 35%, onion, potatoes, peas, salt, wheat, flour, herbs and spices	Not declared

DPS 72	18 Spicy Beef Burgers	burger	raw	frozen	independent retailer	Beef	Beef 63%, water, rusk, soya isolate, potato starch, salt, green chillies, wheat flour, yeast extract, spices, emulsifier E451, onion powder, spice extract, preservative E221, antioxidant E301	British meat used only, No MRM or MDM
DPS 73	BBQ Beef Burgers	burger	raw	refrigerated	independent retailer (butcher)	Beef	N/A	
<b>Sample ID</b>	<b>Full product description</b>	<b>Product type</b>	<b>condition on purchase</b>	<b>storage conditions on purchase</b>	<b>Outlet type</b>	<b>Species</b>	<b>Ingredients</b>	<b>Country of origin</b>
DPS 74	Lamb mince	minced meat	raw	refrigerated	retailer	Lamb	British Lamb	Produced in the UK using British lamb.
DPS 75	Steak Burgers	burger	raw	refrigerated	independent retailer (butcher)	Beef	N/A	
DPS 76	Coarse cut Aberdeen Angus beef mince	minced meat	raw	refrigerated	retailer	Beef	Aberdeen Angus beef	Produced in the UK from British Aberdeen Angus beef
DPS 77	6 gourmet pork sausages	sausages	raw	refrigerated	retailer	Pork	Pork (84%), water, rusk (wheat flour, salt), white bread (wheat flour, water, yeast, salt), salt, black pepper, nutmeg, preservative sodium metabisulphite	Prime British pork from pigs born outdoors and reared in airy, straw bedded barns
DPS 78	8 Beef Burgers 100% British Beef	burger	raw	frozen	retailer	Beef	British beef (99%), sea salt, black pepper.	Produced in the UK from British Beef
DPS 79	Beef lasagne	ready meal	cooked	frozen	retailer	Beef	Full cream milk, water, tomato, minced beef (12%), free range egg pasta, onion, corn flour, tomato puree, unsalted butter, wheat flour, celery, carrot, beef extract, rapeseed oil, salt, garlic puree, mixed herbs, mixed spices. Free range pasta contains durum wheat semolina, water, pasteurised free range egg.	Produced in the UK from British beef

DPS 80	5 Frankfurters	Jar	cooked	ambient	retailer	Pork	Pork (73%), Water, Salt, Milk protein, Spices, Mustard, Seasoning, Lactose, Dextrose, Stabiliser: E331, Antioxidants: E300, Preservative: E250, Natural Casing, Natural Smoke. Brine: Water, Salt	
DPS 81	Quarter Pounder cheese burger	burger	cooked	Hot, ready to eat	fast-food takeaway	Beef		
<b>Sample ID</b>	<b>Full product description</b>	<b>Product type</b>	<b>condition on purchase</b>	<b>storage conditions on purchase</b>	<b>Outlet type</b>	<b>Species</b>	<b>Ingredients</b>	<b>Country of origin</b>
DPS 82	Meatballs	meatballs	cooked	Hot, ready to eat	fast-food takeaway	Beef/ Pork		
DPS 83	Burger	burger	cooked	Hot, ready to eat	fast-food takeaway	Beef		
DPS 84	The original quarter Pounder	burger	cooked	Hot, ready to eat	fast-food takeaway	Beef		
DPS 85	Quarter pounder burger	burger	cooked	Hot, ready to eat	catering van	Not declared		
DPS 86	Quarter pounder burger	burger	cooked	Hot, ready to eat	fast-food takeaway	Not declared		
DPS 87	Doner kebab meat	kebab	cooked	Hot, ready to eat	fast-food takeaway	Not declared		
DPS 88	Plain burger	burger	cooked	Hot, ready to eat	fast-food takeaway	Not declared		
DPS 89	Doner kebab meat	kebab	cooked	Hot, ready to eat	fast-food takeaway	Not declared		
DPS 90	Quarter Pounder beef burger	burger	cooked	Hot, ready to eat	fast-food takeaway	beef		
DPS 91	Beef burger	burger	cooked	Hot, ready to eat	fast-food takeaway	beef		
DPS 92	Beef burger	burger	cooked	Hot, ready to eat	catering van	beef		

DPS 93	Burger	burger	cooked	Hot, ready to eat	catering van	Not declared		
DPS 94	Meatballs	meatballs	cooked	Hot, ready to eat	fast-food takeaway	Beef & pork	From website: 84% meat (beef & pork)	
DPS 95	Single burger, flame grilled	burger	cooked	Hot, ready to eat	fast-food takeaway	Not declared		
DPS 96	Original Burger (plain beef burger)	burger	cooked	Hot, ready to eat	fast-food takeaway	beef		
<b>Sample ID</b>	<b>Full product description</b>	<b>Product type</b>	<b>condition on purchase</b>	<b>storage conditions on purchase</b>	<b>Outlet type</b>	<b>Species</b>	<b>Ingredients</b>	<b>Country of origin</b>
DPS 97	Doner kebab (minced lamb with seasoning)	kebab	cooked	Hot, ready to eat	fast-food takeaway	lamb		
DPS 98	Sausage and chips	sausage	cooked	Hot, ready to eat	fast-food takeaway	Not declared		
DPS 99	1/4 burger	burger	cooked	Hot, ready to eat	fast-food takeaway	Not declared		
DPS 100	Doner kebab meat	kebab	cooked	Hot, ready to eat	fast-food takeaway	Not declared		

**APPENDICES**

Appendix 2

Detailed data for offal

ND – not detected

Offal detected

Sample ID	Product type	% meat (selected ingredients)	Condition on purchase	Offal declared on the label?	Offal detection/ quantification			Additional Comments
					Offal detected type / amount Mean (w/w) offal in meat ± SD	Mass Spec. Validation	Conclusion – presence of offal	
DPS1	canned meat product	Beef (30%)	cooked	No	ND	-	No	
DPS2	sausages	Pork (42%), pork rind	raw	No	ND	-	No	
DPS3	burger	Beef (94%)	raw	No	ND	-	No	
DPS4	ready meal	Beef (19%)	cooked	No	ND	-	No	
DPS5	burger	Beef (69%), beef fat	cooked	No	21.0 ± 0.9% heart	Beef heart confirmed	Yes	
DPS6	minced meat	Beef (100%)	raw	No	~ 2.1% offal*	Unable to determine	Yes * Offal type not yet known, but not liver, heart or lung. Level too low to establish if it is kidney.	
DPS7	burger	Beef (98%)	raw	No	ND	-	No	
DPS8	burger	Beef (69%), beef fat	cooked	No	ND	-	No	
DPS9	meatballs	Beef (72%), beef Fat	cooked	No	ND	-	No	
DPS10	sausages	Pork (42%), pork rind	raw	No	ND	-	No	
DPS11	ready meal	Beef (10%)	cooked	No	ND	-	No	
DPS12	minced meat	Beef (100%)	raw	No	ND	-	No	



Sample ID	Product type	% meat (selected ingredients)	Condition on purchase	Offal declared on the label?	Offal detection/ quantification			Additional Comments
					Offal detected type / amount	Mass Spec. Validation	Conclusion – presence of offal	
					Mean (w/w) offal in meat ± SD			
DPS13	minced meat	Lamb (100%)	raw	No	0.1 ± 0.0% liver <sup>1</sup> ~ 0.6% offal*	<sup>1</sup> Unable to determine (level too low)	Yes * Offal type not yet known, but not liver, heart or lung. Level too low to establish if it is kidney.	
DPS14	ready meal	Meat (19%)	cooked	No	ND	-	No	Meat species not declared. Serum detected beef/lamb
DPS15	sandwich steaks	Beef (?%)	cooked	No	11.4 ± 0.2% heart	Beef heart confirmed	Yes	Amount of beef not declared on label
DPS16	sausages	Pork (46%), pork rind, pork fat	cooked	No	~ 0.1% offal*	Unable to determine	Yes * Offal type not yet known, but not liver, heart or lung. Level too low to establish if it is kidney	
DPS17	burger	Beef (77%)	raw	No	ND	-	No	
DPS18	burger	Beef (73%)	raw	No	ND	-	No	
DPS19	minced meat	Beef (100%)	raw	No	ND	-	No	
DPS20	minced meat	Lamb (100%)	raw	No	1.1 ± 0.0% liver	Lamb liver confirmed	Yes	
DPS21	sausages	Pork (44%), Pork Rind	raw	No	ND	-	No	
DPS22	minced meat	Beef (100%)	raw	No	2.0 ± 0.1% heart	Beef heart confirmed	Yes	
DPS23	meatballs	Beef (83%)	cooked	No	ND	-	No	

DPS24	minced meat	Beef (100%)	raw	No	ND	-	No	
DPS25	burger	Beef (83%)	raw	No	ND	-	No	
DPS26	burger	Beef (99%)	raw	No	ND	-	No	
Sample ID	Product type	% meat (selected ingredients)	Condition on purchase	Offal declared on the label?	Offal detection/ quantification			Additional Comments
					Offal detected type / amount Mean (w/w) offal in meat ± SD	Mass Spec. Validation	Conclusion – presence of offal	
DPS27	sausages	Pork (32%), pork rind, pork fat	raw	No	ND	-	No	
DPS28	ready meal	Beef (11%)	cooked	No	ND	-	No	
DPS29	frankfurter	Pork (63%), Pork Fat	cooked	No	ND	-	No	
DPS30	ready meal	Pork (48%) Beef (35%)	cooked	No	ND	-	No	
DPS31	burger	Beef (85%), Beef Fat	cooked	No	ND	-	No	
DPS32	frankfurter	Pork meat 19%, chicken meat 7%, mechanically deboned chicken meat 22%, pork fat, pork skins	cooked	No	ND	-	No	
DPS33	minced meat	Beef (100%)	raw	No	~ 11.7% offal*	Unable to determine	Yes *Offal type not yet known, but NOT kidney, liver, heart or lung.	
DPS34	burger	Beef (90%)	raw	No	ND	-	No	
DPS35	canned meat product	Pork (80%)	cooked	No	ND	-	No	
DPS36	frankfurter	Pork (85%)	cooked	No	ND	-	No	

DPS37	canned meat product	Cooked beef	cooked	No	ND	-	No	
DPS38	canned meat product	Beef	cooked	No	ND	-	No	
DPS39	burger	Beef (98%)	raw	No	ND	-	No	
Sample ID	Product type	% meat (selected ingredients)	Condition on purchase	Offal declared on the label?	Offal detection/ quantification			Additional Comments
					Offal detected type / amount Mean (w/w) offal in meat ± SD	Mass Spec. Validation	Conclusion – presence of offal	
DPS40	burger	Lamb (45%), Mutton (42%)	raw	No	0.5 ± 0.0% liver ~ 0.4% offal*	Presence of liver confirmed by MS; level too low to distinguish if liver is from lamb or beef	Yes *Other offal type not yet known, but NOT liver, heart or lung. Level too low to establish whether it is kidney	
DPS41	minced meat	Beef (100%)	raw	No	ND	-	No	
DPS42	ready meal	Beef (15%)	cooked	No	ND	-	No	
DPS43	canned meat product	Cooked beef (93.5%), Beef (3%)	cooked	No	ND	-	No	
DPS44	burger	Beef (63%)	raw	No	ND	-	No	
DPS45	burger	Beef (99%)	raw	No	ND	-	No	
DPS46	burger	Beef (80%)	raw	No	ND	-	No	
DPS47	minced meat	Beef (65%), Pork (35%)	raw	No	ND	-	No	
DPS48	canned meat product	Cooked beef (96%)	cooked	No	ND	-	No	
DPS49	minced meat	Beef (65%), Pork (35%)	raw	No	ND	-	No	
DPS50	burger	Beef (81%)	raw	No	ND	-	No	
DPS51	burger	Beef (77%), beef fat	raw	No	ND	-	No	

DPS52	ready meal	Beef (?%)	cooked	No	ND	-	No	Beef content not declared
DPS53	meatballs	Beef (90%)		No	ND	-	No	
DPS54	minced meat	Beef (100%)	raw	No	ND	-	No	
DPS55	burger	Beef (60%)	raw	No	ND	-	No	
DPS56	kebab	Lamb (50%)		No	ND	-	No	
Sample ID	Product type	% meat (selected ingredients)	Condition on purchase	Offal declared on the label?	Offal detection/ quantification			Additional Comments
					Offal detected type / amount Mean (w/w) offal in meat $\pm$ SD	Mass Spec. Validation	Conclusion – presence of offal	
DPS57	sausages	Pork (73%), Pork Fat, Pork Rind	raw	No	ND	-	No	
DPS58	ready meal	Minced beef (22%)	cooked	No	ND	-	No	
DPS59	burger	Beef (85%)	raw	No	ND	-	No	
DPS60	meatballs	Pork (83%)		No	ND	-	No	
DPS61	minced meat	Beef (65%), Pork (35%)	raw	No	ND	-	No	
DPS62	burger	Beef (81%)	raw	No	ND	-	No	
DPS63	sausages	Pork (42%), pork fat (10%)	raw	No	ND	-	No	
DPS64	meatballs	Beef (59%), beef tendon (8%)		No	ND	-	No	
DPS65	canned meat product	Beef (75%)	cooked	No	ND	-	No	
DPS66	minced meat	Pork (100%)	raw	No	ND	-	No	
DPS67	minced meat	Beef (100%)	raw	No	ND	-	No	
DPS68	burger	Beef (95%)	raw	No	ND	-	No	
DPS69	ready meal	Beef (27%)	cooked	No	ND	-	No	
DPS70	kebab	Beef (67%)	raw	No	ND	-	No	

DPS71	kebab	Mutton (35%)		No	ND	-	No	
DPS72	burger	Beef (63%)	raw	No	ND	-	No	
DPS73	burger	Beef (?)	raw	No	ND	-	No	
DPS74	minced meat	Lamb (100%)	raw	No	ND	-	No	
DPS75	burger	Beef (?)	raw	No	ND	-	No	
DPS76	minced meat	Beef (100%)	raw	No	ND	-	No	
Sample ID	Product type	% meat (selected ingredients)	Condition on purchase	Offal declared on the label?	Offal detection/ quantification			Additional Comments
					Offal detected type / amount Mean (w/w) offal in meat $\pm$ SD	Mass Spec. Validation	Conclusion – presence of offal	
DPS77	sausages	Pork (84%)	raw	No	ND	-	No	
DPS78	burger	Beef (99%)	raw	No	ND	-	No	
DPS79	ready meal	Beef (12%)	cooked	No	ND	-	No	
DPS80	frankfurter	Pork (73%)	cooked	No	ND	-	No	
DPS81	burger	Beef	cooked	Don't know	ND	-	No	
DPS82	meatballs	Species not known	cooked	Don't know	ND	-	No	
DPS83	burger	Beef	cooked	Don't know	ND	-	No	
DPS84	burger	Beef	cooked	Don't know	ND	-	No	
DPS85	burger	Species not declared but assumed to be beef	cooked	Don't know	6.5 $\pm$ 0.3% heart	Beef heart confirmed	Yes	Soya bean proteins detected by MS
DPS86	burger	Species not declared but assumed to be beef	cooked	Don't know	12.5 $\pm$ 1.3% heart	Beef heart confirmed	Yes	
DPS87	kebab	Doner kebab, therefore expect lamb	cooked	Don't know	ND	-	No	
DPS88	burger	Species not declared but assumed to be beef	cooked	Don't know	17.7 $\pm$ 1.5% heart ~1.4% offal*	Beef heart confirmed	Yes * Offal type not yet known, but not liver, heart or lung. Level too	

Sample ID	Product type	% meat (selected ingredients)	Condition on purchase	Offal declared on the label?	Offal detection/ quantification			Additional Comments
					Offal detected type / amount Mean (w/w) offal in meat $\pm$ SD	Mass Spec. Validation	Conclusion – presence of offal	
DPS89	kebab	Doner kebab, therefore expect lamb	cooked	Don't know	ND	-	low to establish if it is kidney. No	
DPS90	burger	Beef	cooked	Don't know	8.8 $\pm$ 0.6% heart ~1.3% offal*	Beef heart confirmed	Yes * Offal type not yet known, but not liver, heart or lung. Level too low to establish if it is kidney.	
DPS91	burger	Beef	cooked	Don't know	10.3 $\pm$ 0.3% heart	Beef heart confirmed	Yes	
DPS92	burger	Beef	cooked	Don't know	16.5 $\pm$ 1.3% heart ~0.1% offal*	Beef heart confirmed	Yes * Offal type not yet known, but not liver, heart or lung. Level too low to establish if it is kidney	
DPS93	burger	Species not declared but assumed to be beef	cooked	Don't know	5.0 $\pm$ 0.4% heart	Beef heart confirmed	Yes	Presence of beef meat confirmed by MS
DPS94	meatballs	From website: 84% meat (beef & pork)	cooked	Don't know	ND	-	No	
DPS95	burger	Species not declared but assumed to be beef	cooked	Don't know	21.5 $\pm$ 1.4% heart ~1.8% offal*	Beef heart confirmed	Yes * Offal type not yet known, but not liver, heart or lung. Level too low to establish if it is kidney.	
DPS96	burger	Beef	cooked	Don't know	12.9 $\pm$ 0.9% heart	Beef heart confirmed	Yes	

DPS97	kebab	Doner kebab, therefore expect lamb	cooked	Don't know	ND	-	No	
DPS98	sausages	species not known	cooked	Don't know	ND	-	No	
DPS99	burger	Species not declared but assumed to be beef	cooked	Don't know	11.3 ± 1.3% heart	Beef heart confirmed	Yes	Soya bean proteins detected by MS.
DPS100	kebab	Doner kebab, therefore expect lamb	cooked	Don't know	ND	-	No	Meat species detected by MS: lamb, beef and chicken

**APPENDICES**

Appendix 3

Detailed data for added serum

B= beef, L= lamb, P= pork, Ch = chicken, Ru = rusk, R= raw, C= cooked

Added serum detected	Uncertain
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Sample ID	Product type	% meat (selected ingredients)	Condition on purchase (C/R)	Condition of sample at analysis C/R	Composition of Std.	Signal of Std	Signal 2% added serum	Signal sample	Calculated threshold	Comments	Species detected B/L/P	Conclusion (serum higher than expected?)	Offal detected
DPS 1	canned meat product	beef (30%)	C	C	100% CB	138.1	-	none	-	Unable to determine due to highly processed nature of the sample	?	?	No
DPS 2	sausage	pork (42%), pork rind	R	C	45% CP 55% CCh	117.5	190.5	187.9	178.0	above threshold, below 2%	P	Uncertain	No
				R	40% RP 60% Ru	152.3	218.3	94.7	229.9	below threshold, below 2% in presence of 60% rusk			
				R	45% RP 15% Ru	59.8	217.5	182.6	90.4	above threshold, below 2% using more appropriate rusk concentration of 15%			
DPS 3	burger	beef (94%)	R	C	90% CB 10% Ru	66.4	90.9	116.4	108.1	above threshold, above 2%	B	Uncertain	No
				R	100% RB	52.6	123.6	79.1	85.6	below threshold, below 2%			
DPS 4	ready meal	beef (19% of total product)	C	C	100% CB	143.2	-	none	-	Unable to determine due to highly processed nature of the sample	?	?	No
DPS 5	burger	beef (69%), beef fat	C	C	90% CB 10% Ru	63.3	132.0	117.4	174.4	below threshold, below 2%	B	No	Heart 21%
DPS 6	minced meat	beef (100%)	R	C	100% CB	93.2	105.9	68.0	160.6	below threshold, below 2%	B	Yes	~2.1% offal



Sample ID	Product type	% meat (selected ingredients)	Condition on purchase (C/R)	Condition of sample at analysis C/R	Composition of Std.	Signal of Std	Signal 2% added serum	Signal sample	Calculated threshold	Comments	Species detected B/L/P	Conclusion (serum higher than expected?)	Offal detected
				R	100% RB	55.5	133.5	258.1	90.3	above threshold, above 2%			
DPS 7	burger	beef (98%)	R	C	100% CB	93.6	144.1	78.7	152.3	below threshold, below 2%	B	No	No
				R	100% RB	21.7	44.4	36.9	35.3	close to threshold, below 2%			
DPS 8	burger	beef (69%), beef fat	C	C	90% CB 10% Ru	68.8	202.0	215.4	111.9	above threshold, above 2%	B	Yes	No
DPS 9	meatballs	beef (72%), beef fat	C	C	70% CB 5% Ru 25% CCh	60.3	-	35.3	98.1	below threshold	B	No	No
DPS 10	sausage	pork (42%), pork rind	R	C	45% CP 55% CCh	117.5	190.5	174.7	178.0	below threshold, below 2%	P	Uncertain	No
				R	40% RP 60% Ru	152.3	218.3	160.8	229.9	below threshold, below 2%			
				R	40% RP 15% Ru	59.8	217.5	200.4	90.4	above threshold, just below 2%			
DPS 11	ready meal	beef (10% of total product)	C	C	100% CB	143.2	-	41.0	233.0	below threshold	B	No	No
DPS 12	minced meat	beef (100%)	R	C	100% CB	93.2	105.9	28.0	160.6	below threshold, below 2%	B	Uncertain	No
				R	100% RB	47.4	118.3	107.4	77.1	above threshold, below 2%			
DPS 13	minced meat	lamb (100%)	R	C	100% CL	186.6	127.7	28.1	-	below 2%	L	Yes	0.1% liver, ~0.6% offal
				R	100% RL	67.8	84.5	168.7	-	above 2%			
DPS 14	ready meal	meat (19% of total product)	C	C	100%CB	143.2	-	36.9	233.0	below threshold, very low signal for B/L	B/L	No	No

Sample ID	Product type	% meat (selected ingredients)	Condition on purchase (C/R)	Condition of sample at analysis C/R	Composition of Std.	Signal of Std	Signal 2% added serum	Signal sample	Calculated threshold	Comments	Species detected B/L/P	Conclusion (serum higher than expected?)	Offal detected
DPS 15	sandwich steaks	Beef (?)	C	C	70% CB, 5% Ru, 25% CCh	35.3	-	5.3	57.4	below threshold, very low signal for B	B	No	11.4% heart
DPS 16	sausage	pork (46%), pork rind, pork fat	C	C	45% CP 55% CCh	71.4	155.8	189.9	108.4	above threshold, above 2%	P	Yes	~0.1% offal
				C	100% CP	230.4	349.8	575.1	347.8	above threshold, above 2%			
DPS 17	burger	beef (77%)	R	C	80% CB 20% Ru	54.8	73.3	29.6	89.2	below threshold, below 2%	B	No	No
				R	90% RB 10% Ru	39.6	-	15.6	64.5	below threshold	B		
DPS 18	burger	beef (73%)	R	C	70%CB 5% Ru 25% CCh	24.13	-	4.0	39.3	below threshold, very low signal	B	No	
				R	70% RB 30% Ru	79.7	-	24.1	129.7	below threshold			
DPS 19	minced meat	Beef (100%)	R	C	100% CB	93.2	-	66.4	160.6	below threshold	B	No	No
DPS 20	minced meat	lamb (100%)	R	C	100% CL	462.0	577.9	231.1	-	below 2%	L	No	1.1% liver
				R	100% RL	34.7	59.4	53.9	-	below 2%			
DPS 21	sausage	pork (44%), pork rind	R	C	45% CP 55% CCh	71.4	155.8	190.7	108.1	above threshold, above 2%	P	uncertain	No
				R	40% RP 60% Ru	92.9	186.3	71.9	140.3	below threshold, below 2%			
				R	45% RP 15%Ru	49.8	213.5	144.7	75.2	above threshold, below 2%			
DPS 22	minced meat	beef (100%)	R	C	100% CB	77.1	103.7	16.8	125.5	below threshold, below 2%	B	No	2% heart
				R	100% RB	37.3	48.6	26.5	49.2	below threshold, below 2%			

DPS 23	meatballs	beef (83%)	C	C	80% CB 20% Ru	54.5	-	none	-	Unable to determine due to highly processed nature of the sample	?	?	No
Sample ID	Product type	% meat (selected ingredients)	Condition on purchase (C/R)	Condition of sample at analysis C/R	Composition of Std.	Signal of Std	Signal 2% added serum	Signal sample	Calculated threshold	Comments	Species detected B/L/P	Conclusion (serum higher than expected?)	Offal detected
DPS 24	minced meat	beef (100%)	R	C	100% CB	77.1	103.7	99.4	125.5	below threshold, below 2%	B	No	No
				R	100% RB	37.3	48.6	26.1	49.2	below threshold, below 2%			
DPS 25	burger	beef (83%)	R	C	80% CB 5% Ru 15% CCh	69.3	-	33.0	112.7	below threshold	B	No	No
				R	90% RB 10% Ru	279.1	-	261.9	454.1	below threshold			
DPS 26	burger	beef (99%)	R	C	100% CB	70.5	115.8	118.4	114.7	above threshold, above 2%	B	No	No
				R	100% RB	21.7	44.4	20.2	35.3	below threshold, below 2%			
DPS 27	sausage	pork (32%), pork rind, pork fat	R	C	35% CP 65% CCh	44.2	142.8	30.5	66.8	below threshold, below 2%	P	Yes	No
				R	40% RP 60% Ru	68.0	218.2	191.1	102.6	above threshold, below 2%			
				R	45% RP 15% Ru	49.8	213.5	223.5	75.2	above threshold, above 2%			
DPS 28	ready meal	beef (11% of total)	C	C	100% CB	126.9	154.8	13.8	206.5	below threshold, below 2%	B	No	No
DPS 29	frankfurter	pork (63%), pork fat	C	C	65% CP 35% Ru	16.8	30.8	v.slight signal	-	Unable to determine due to highly processed nature of the sample. Slight pork signal detected	P	?	No

DPS 30	ready meal	pork (48%, beef (35%))	C	C	45% CP 55% CCh	36.2	150.1	12.4	54.6	below threshold, below 2%	P/B	No	No
				C	35% CB 5% Ru 60% CCh	4.6	-	1.2	7.5	below threshold			
Sample ID	Product type	% meat (selected ingredients)	Condition on purchase (C/R)	Condition of sample at analysis C/R	Composition of Std.	Signal of Std	Signal 2% added serum	Signal sample	Calculated threshold	Comments	Species detected B/L/P	Conclusion (serum higher than expected?)	Offal detected
DPS 31	burger	beef (85%, beef fat)	C	C	80% CB 20% Ru	54.8	73.3	105.3	89.2	above threshold, above 2%	B	Yes	No
				C	100% CB	79.4	175.6	203.1	129.2	above threshold, above 2%			
DPS 32	frankfurter	pork meat (19%), chicken meat (7%), mechanically deboned chicken meat (22%), pork fat, pork skins	C	C	20% CP 80% CCh	21.3	-	15.1	32	below threshold	P	No	No
DPS 33	minced meat	beef (100%)	R	C	100% CB	77.1	103.7	62.5	125.5	below threshold, below 2%	B	Yes	~11.7% offal
				R	100% RB	55.5	133.5	321.7	90.3	above threshold, above 2%			
DPS 34	burger	beef (90%)	R	C	90% CB 5% Ru 5% CCh	51.4	-	56.4	83.6	below threshold	B	No	No
				R	100% RB	52.6	123.6	40.8	85.6	below threshold, below 2%			
DPS 35	canned meat product	pork (80%)	C	C	80% CP 20% Ru	87.8	155.8	v. slight signal	132.5	Unable to determine due to highly processed nature of the sample. Very slight signal for pork	P	?	No

DPS 36	frankfurter	pork (85%)	C	C	80% CP 20% Ru	87.8	155.8	v. slight signal	132.5	Unable to determine due to highly processed nature of the sample. Very slight signal for pork	P	?	No
Sample ID	Product type	% meat (selected ingredients)	Condition on purchase (C/R)	Condition of sample at analysis C/R	Composition of Std.	Signal of Std	Signal 2% added serum	Signal sample	Calculated threshold	Comments	Species detected B/L/P	Conclusion (serum higher than expected?)	Offal detected
DPS 37	canned meat product	cooked beef	C	C	100% CB	164.4	200.4	none	267.5	Unable to determine due to highly processed nature of the sample.	?	?	No
DPS 38	canned meat product	Beef	C	C	100% CB	164.4	200.4	none	267.5	Unable to determine due to highly processed nature of the sample.	?	?	No
DPS 39	burger	beef (98%)	R	R	100% RB	32.0	51.4	34.1	52.1	below threshold, below 2%	B	No	No
DPS 40	burger	lamb (45%), mutton (42%)	R	C	100% CL	71.3	-	28.3	-	below 100% and 85% standards	L	No	0.5% liver, 0.4% offal
					85% CL 15% Ru	60.7	-	28.3	-				
					R	100% RL	170.8	221.5	80.7	-			
DPS 41	minced meat	beef (100%)	R	C	100% CB	109.5	131.9	85.5	166.8	below threshold, below 2%	B	No	No
				R	100% RB	17.0	41.8	26.3	27.6	below threshold, below 2%			
DPS 42	ready meal	beef (15% of total)	C	C	100% CB	126.9	154.8	35.2	206.5	below threshold, below 2%	B	No	No

DPS 43	canned meat product	cooked beef (93.5%, beef (3%))	C	C	100% CB	164.4	200.4	none	267.5	Unable to determine due to highly processed nature of the sample	?	?	No
DPS 44	burger	beef (63%)	R	C	60% CB 5% Ru 35% CCh	10.0		11.3	16.3	below threshold	B	No	No
				R	60% RB 40% Ru	56.4	147.8	51.7	91.8	below threshold, below 2%			
Sample ID	Product type	% meat (selected ingredients)	Condition on purchase (C/R)	Condition of sample at analysis C/R	Composition of Std.	Signal of Std	Signal 2% added serum	Signal sample	Calculated threshold	Comments	Species detected B/L/P	Conclusion (serum higher than expected?)	Offal detected
DPS 45	burger	beef (99%)	R	C	100% CB	93.6	144.1	130.8	152.3	below threshold, below 2%	B	No	No
				R	100% RB	32.0	51.4	32.5	52.1	below threshold, below 2%			
DPS 46	burger	beef (80%)	R	C	80% CB 5% Ru 15% CCh	58.4	-	59.1	95.0	below threshold	B	No	No
				R	90% RB 10% Ru	279.1	-	240.3	454.1	below threshold			
DPS 47	minced meat	beef (65%), pork (35%)	R	C	65% CB 35% CP	74.3	-	50.2	120.8	below threshold	B/P	No	No
				C	65% CB 35% CP	9.9	-	35.7	14.9	above threshold			
				R	60% RB 40% Ru	32.6	91.5	29.7	53.0	below threshold, below 2%			
				R	40% RP 60% Ru	68.0	218.2	36.2	102.6	below threshold, below 2%			
DPS 48	canned meat product	cooked beef (96%)	C	C	100% CB	160.3	237.5	none	260.8	Unable to determine due to highly processed nature of the sample	?	?	No
DPS 49	minced meat	beef (65%), pork (35%)	R	C	65% CB 35% CP	74.3	-	19.5	207.1	below threshold	B/P	No	No

				C	65% CB 35% CP	9.9		7.3	14.9	below threshold			
				R	40% RP 60% Ru	51.9	68.1	28.4	78.4	below threshold, below 2%			
				R	60% RB 40% Ru	46.0	120.9	16.5	74.9	below threshold, below 2%			
Sample ID	Product type	% meat (selected ingredients)	Condition on purchase (C/R)	Condition of sample at analysis C/R	Composition of Std.	Signal of Std	Signal 2% added serum	Signal sample	Calculated threshold	Comments	Species detected B/L/P	Conclusion (serum higher than expected?)	Offal detected
DPS 50	burger	beef (81%)	R	C	80% CB 5% Ru 15% CCh	58.4	-	50.5	95	below threshold	B	No	No
				R	90% RB 10% Ru	82.3	-	77.8	133.9	below threshold			
DPS 51	burger	beef (77%), beef fat	R	C	80% CB 20% Ru	54.8	-	45.8	89.2	below threshold	B	No	No
				R	70% RB 30% Ru	79.7	-	56.4	129.7	below threshold			
DPS 52	ready meal	beef (?)	C	C	100% CB	126.9	154.8	28.8	206.5	below threshold	B	No	No
DPS 53	meatballs	beef (90%)	R	C	90% CB 5% Ru 5% CCh	51.4	-	44.2	83.6	below threshold	B	No	No
				R	90% RB 10% Ru	45.4	-	47.1	77.0	below threshold			
DPS 54	minced meat	beef (100%)	R	C	100% CB	109.5	131.9	81.2	166.8	below threshold, below 2%	B	No	No
				R	100% RB	17.0	41.8	17.9	27.6	below threshold, below 2%			
DPS 55	burger	beef (60%)	R	R	60% RB 40% Ru	56.4	147.8	65.9	91.8	below threshold, below 2%	B	No	No
DPS 56	kebab	lamb (50%)	R	C	50% CL 50% CCh	54.9	-	47.5	-	below standard	L	No	No
				R	100% RL	170.8	221.5	58.0	-	below 2%			

DPS 57	sausage	pork (73%), pork fat, pork rind	R	C	80% CP 20% Ru	119.3	137.4	232.7	179.8	above threshold, above 2%	P	No	No
			R	R	100% RP	322.9	626.8	265.2	487.4	below threshold, below 2%			
DPS 58	ready meal	minced beef (22% of total product)	C	C	100% CB	73.9	125.2	3.1	120.3	below threshold, below 2%	B	No	No
Sample ID	Product type	% meat (selected ingredients)	Condition on purchase (C/R)	Condition of sample at analysis C/R	Composition of Std.	Signal of Std	Signal 2% added serum	Signal sample	Calculated threshold	Comments	Species detected B/L/P	Conclusion (serum higher than expected?)	Offal detected
DPS 59	burger	beef (85%)	R	C	80% CB 5% Ru 15% CCh	69.3	-	73.9	112.7	below threshold	B	No	No
			R	R	90% RB 10% Ru	82.3	-	102.9	133.9	below threshold			
DPS 60	meatballs	pork (83%)	R	R	100% RP	116.3	246.2	121.3	175.6	below threshold, below 2%	P	No	No
DPS 61	minced meat	beef (65%), pork (35%)	R	C	65% CB 35% CP	50.2	-	23.1	120.8	below threshold	B/P	No	No
			R	C	65% CB 35% CP (pork)	9.9	-	5.0	14.9	below threshold			
			R	R	60% RB 40% Ru	46.0	120.9	65.1	74.9	below threshold, below 2%			
DPS 62	burger	beef (81%)	R	C	80% CB 20% Ru	50.4	76.0	70.5	81.9	below threshold, below 2%	B	No	No
			R	R	90% RB 10% Ru	76.2	-	70.2	124.0	below threshold			
DPS 63	sausage	pork (42%), pork fat (10%)	R	C	45% CP 55% CCh	117.5	190.5	175.5	178.0	just below threshold, below 2%	P	Uncertain	No
			R	R	45% RP 15% Ru	70.8	288.6	196.9	106.9	above threshold, below 2%			
DPS 64	meatballs	beef (59%), beef tendon (8%)	C	C	100% CB	84.4	171.0	117.7	137.3	below threshold, below 2%	B	Uncertain	No



				C	60% CB 5% Ru 35% CCh	20.4	-	48.4	33.2	above threshold	B		
DPS 65	canned meat product	beef (75%)	C	C	100% CB	160.3	237.5	none	260.8	Unable to determine due to highly processed nature of the sample.	?	?	No
<b>Sample ID</b>	<b>Product type</b>	<b>% meat (selected ingredients)</b>	<b>Condition on purchase (C/R)</b>	<b>Condition of sample at analysis C/R</b>	<b>Composition of Std.</b>	<b>Signal of Std</b>	<b>Signal 2% added serum</b>	<b>Signal sample</b>	<b>Calculated threshold</b>	<b>Comments</b>	<b>Species detected B/L/P</b>	<b>Conclusion (serum higher than expected?)</b>	<b>Offal detected</b>
DPS 66	minced meat	pork (100%)	R	C	100% CP	152.6	162.2	137.6	230.3	below threshold, below 2%	P	No	No
				R	100% RP	116.3	246.2	139.1	175.6	below threshold, below 2%			
DPS 67	minced meat	beef (100%)	R	C	100% CB	109.5	131.9	59.1	166.8	below threshold, below 2%	B	No	No
				R	100% RB	17.0	41.8	11.8	27.6	below threshold, below 2%			
DPS 68	burger	beef (95%)	R	C	100% CB	21.2	-	22.9	34.5	below threshold	B	No	No
				R	90% RB 10% Ru	39.6	-	25.1	64.4	below threshold			
DPS 69	ready meal	beef (27% of total product)	C	C	100% CB	73.9	125.2	none	120.3	Unable to determine due to highly processed nature of the sample.	?	?	No
DPS 70	kebab	beef (67%)	R	C	70% CB 5% Ru 25% CCh	24.1	-	6.3	39.3	below threshold	B	Yes	No
				R	70% RB 30% R	79.7	-	220.3	129.7	above threshold			
				R	100% RB	37.6	-	95.8	61.2	above threshold			
DPS 71	kebab	mutton (35%)	C	C	35% CL 65% CCh	35.6	74.2	41.4	-	below 2%	L	No	No

DPS 72	burger	beef (63%)	R	C	60% CB 5% Ru 35% CCh	20.4	-	17.7	33.2	below threshold	B	No	No
				R	60% RB 40% Ru	32.6	91.5	41.9	53.0	below threshold, below 2%			
DPS 73	burger	beef (?)	R	C	100% CB	72.6	-	71.9	118.1	below threshold	B	No	No
				R	100% RB	46.4	-	56.1	75.5	below threshold			
Sample ID	Product type	% meat (selected ingredients)	Condition on purchase (C/R)	Condition of sample at analysis C/R	Composition of Std.	Signal of Std	Signal 2% added serum	Signal sample	Calculated threshold	Comments	Species detected B/L/P	Conclusion (serum higher than expected?)	Offal detected
DPS 74	minced meat	lamb (100%)	R	C	100% CL	184.6	-	94.6	-	below standard	L	No	No
				R	100% RL	22.4	39.1	21.0	-	below 2%			
DPS 75	burger	beef (?)	R	R	100% RB	59.2	-	35.6	96.3	below threshold	B	No	No
DPS 76	minced meat	Beef (100%)	R	C	100% CB	70.5	115.8	96.1	114.7	below threshold, below 2%	B	No	No
				R	100% RB	21.7	44.4	36.2	35.3	similar to threshold, below 2%			
DPS 77	sausage	pork (84%)	R	C	80% CP 5% Ru 15% CCh	21.3	-	74.8	32.1	above threshold	P	No	No
				R	100% RP	361.9	666.4	109.1	546.3	below threshold, below 2%			
DPS 78	burger	beef (99%)	R	C	100% CB	93.6	144.1	100.0	152.3	below threshold, below 2%	B	No	No
DPS 79	ready meal	beef (12% of total product)	C	C	100% CB	73.9	125.2	none	120.3	Unable to determine due to highly processed nature of the sample.	?	?	No
DPS 80	frankfurter	pork (73%)	C	C	100% CB	158.6	-	none	258.1	Unable to determine due to highly processed	?	?	No

Sample ID	Product type	% meat (selected ingredients)	Condition on purchase (C/R)	Condition of sample at analysis C/R	Composition of Std.	Signal of Std	Signal 2% added serum	Signal sample	Calculated threshold	Comments	Species detected B/L/P	Conclusion (serum higher than expected?)	Offal detected
DPS 81	burger	beef	C	C	100% CB	67.3	122.0	153.7	109.5	above threshold, above 2%	B	Yes	No
				C	100% CB	79.4	149.0	218.0	129.2	above threshold, above 2%			
DPS 82	meatballs	?	C	C	100% CB	67.3	122.0	none	109.5	no signal for beef or pork	?	?	No
DPS 83	burger	beef	C	C	100% CB	67.3	122.0	107.3	109.5	below threshold, below 2%	B	No	No
				C	100% CB	85.1	-	81.9	138.4	below threshold			
DPS 84	burger	beef	C	C	100% CB	81.3	130.9	166.3	132.2	above threshold, above 2%	B	Yes	No
				C	100% CB	79.4	149.0	225.4	129.2	above threshold, above 2%			
DPS 85	burger	species not declared	C	C	100% CB	81.3	130.9	42.6	132.2	below threshold, below 2%. Trace pork detected	B/P	No	6.5% heart
DPS 86	burger	species not declared	C	C	100% CB	81.3	130.9	12.9	132.2	Low signal for beef	B	No	12.5% heart
DPS 87	kebab	species not declared	C	C	100% CB	55.9	107.4	65.0	90.9	below threshold, below 2%	B or L	No	No
DPS 88	burger	species not declared	C	C	100% CB	55.9	107.4	115.4	90.9	above threshold, above 2%	B	Yes	17.7% heart, ~1.4% offal
DPS 89	kebab	species not declared	C	C	100% CB	55.9	107.4	18.9	90.9	below threshold, below 2%	B or L	No	No

DPS 90	burger	beef	C	C	100% CB	362.3	597.4	607.1	589.5	above threshold, above 2%	B	Yes	8.8% heart, 1.3% offal
DPS 91	burger	beef	C	C	100% CB	79.3	128.0	17.8	129.0	below threshold, below 2%	B	No	10.3% heart
DPS 92	burger	beef	C	C	100% CB	79.3	128.0	48.0	129.0	below threshold, below 2%	B	No	16.5% heart. 0.1% offal
DPS 93	burger	species not declared	C	C	100% CB	100.0	151.0	0.3	162.8	Very low beef signal detected	B	No	5% beef heart
Sample ID	Product type	% meat (selected ingredients)	Condition on purchase (C/R)	Condition of sample at analysis C/R	Composition of Std.	Signal of Std	Signal 2% added serum	Signal sample	Calculated threshold	Comments	Species detected B/L/P	Conclusion (serum higher than expected?)	Offal detected
DPS 94	meatballs	84% meat (pork and beef)	C	C	100% CB	100.1	151.0	76.2	162.8	below threshold, below 2%	B/P	No	No
				C	100% CP	202.0	247.8	91.0	304.9	below threshold, below 2%			
DPS 95	burger	species not declared	C	C	100% CB	100.1	151.0	102.5	162.8	below threshold, below 2%	B	No	21,5% heart, 1.8% offal
DPS 96	burger	beef	C	C	100% CB	88.5	126.6	263.3	144.0	above threshold, above 2%	B	Yes	12.9% heart
				C	100% CB	140.8	182.8	473.3	229.2	above threshold, above 2%			
DPS 97	kebab	species not declared	C	C	100% CB	88.5	126.6	26.4	144.0	below threshold, below 2%	B or L	No	No
DPS 98	sausage	species not declared	C	C	100% CP	155.0	236.2	202.1	234.0	below threshold, below 2%	P	No	No
				C	100% CP	478.7	655.1	541.5	722.6	below threshold, below 2%			

DPS 99	burger	species not declared	C	C	100% CB	108.8	155.9	209.5	177.1	above threshold, above 2%	B	Yes	11.3% heart
				C	100% CB	319.3	462.2	712.4	519.6	above threshold, above 2%			
DPS 100	kebab	species not declared	C	C	100% CB	108.8	155.9	none	177.0	No signal detected for either beef or pork	?	?	No
					100% CP	157.6	187.8	none	237.9				