

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

Sample Reference Number	Local Authority Name	Sample Date	Premise Type	Premises name and postcode	Brand	Food Description	Analyst Comments
80200264385	Ards and North Down Borough Council	01/03/2017	Retailers	Sections 31 & 43	N/A	PORK SAUSAGES	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)            Medium part (30 - 60%)            Minor part (5 - 30%)            Diminutive part (1 - 5%)            Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:            Pork (major part)            Sheep (minor part)            Beef (very diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 require pork sausages to contain meat from pigs only. In addition to bearing a revised name to reflect its composition, this meat product must be labelled a QUID declaration of the proportion of each species off meat used in it. Information must also be available for consumers regarding allergenic ingredients such as sulphites or cereals containing gluten used in the product.</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

80200264401	Ards and North Down Borough Council	02/03/2017	Retailers	Sections 31 & 43	N/A	PORK SAUSAGES	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Pork (major part)          Beef (diminutive part)          Sheep (very diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 require pork sausages to contain meat from pigs only. In addition to bearing a revised name to reflect its composition, this meat product must be labelled a QUID declaration of the proportion of each species off meat used in it. Information must also be available for consumers regarding allergenic ingredients such as sulphites or cereals containing gluten used in the product.</p>
80200263668	Ards and North Down	24/01/2017	Manufacturers mainly	Sections 31 & 43	N/A	PORK SAUSAGES	<p>The apparent meat content of the sample was acceptable; the level of sulphur dioxide preservative found was not excessive.</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

	Borough Council		selling by retail				<p>Information must be available for consumers regarding allergenic ingredients such as sulphites or cereals containing gluten used in the product.</p> <p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Pork (major part)          Chicken (minor part)          Beef (diminutive part)          Sheep (very diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 require pork sausages to contain meat from pigs only.</p>
80200263551	Ards and North Down Borough Council	19/01/2017	Retailers	Sections 31 & 43	N/A	THICK PORK SAUSAGES	<p>The apparent meat content of the sample was acceptable; the level of sulphur dioxide preservative found was not excessive.</p> <p>DNA was extracted from the sample. Seven</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>real-time PCR assays specific for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of animal DNA. present. Using the detected signals, all species DNA amounts present in the sample are calculated as relative values (%), related to the total amount of determined DNA, and are given in semi-quantitative ranges:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Pork (major part)          Sheep (minor part)          Beef (diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 require pork sausages to contain meat from pigs only. The name of the product and QUID declarations provided must be amended to reflect all of the species meat used in it.</p> <p>Information must be available for consumers regarding allergenic ingredients such as sulphites or cereals containing gluten used in the product.</p>	
807006224426	Belfast City Council	17/02/2017	Manufacturers mainly	Sections 31 & 43	N/A	LAMB MINCE	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus</i></p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

			selling by retail				<p>gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Sheep (major part)          Beef (minor part)</p> <p>The sample was described as "Lamb mince", and was therefore not of the substance demanded, contrary to the requirements of Article 13 Food Safety (Northern Ireland) Order 1991.</p>
89800170037	Blackpool Council	31/07/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	Lamb Korma	<p>I would expect the meat ingredient of a meat product described as 'lamb korma' to be derived only from sheep unless otherwise qualified. DNA of sheep was not detected in the sample. DNA of cow was detected in the sample. I am of the opinion that the meat of the sample was derived from cow and that the food was not of the nature demanded by the purchaser.</p>
882HQINET0103619	Bracknell Forest Unitary Authority	07/03/2017	Retailers	Sections 31 & 43	Sections 31 & 43	PORK TOULOUSE (FREE RANGE ENGLISH	<p>The sample was analysed for a range of meat species using DNA techniques. Bovine (cattle), porcine (pig) ovine (sheep) and chicken DNA was detected in the sample. The amount of each DNA type was quantified</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						PORK, RED WINE, PARSLEY)	in relation to the amount of total amplified DNA as follows: Bovine DNA = 0.7% of total amplified DNA Porcine DNA = 92.8% of total amplified DNA Ovine DNA = 5.8% of total amplified DNA Chicken DNA = 0.7% of total amplified DNA It is my opinion that a sausage described as an 'Pork Toulouse (English free range pork)' should consist only of pig meat unless further qualified. I am therefore of the further opinion that the sample is not of the nature demanded within the meaning of the Food Safety Act 1990.
40500010597	Bury Metropolitan Borough Council	14/02/2017	Retailers	Sections 31 & 43	N/A	MINCED LAMB	The sample was described as 'minced lamb'. DNA of cow and sheep was detected in the sample. It was estimated that approximately 20% of the DNA present was of cow origin which was indicative of the presence of beef. I am of the opinion that the food was not of the nature demanded by the purchaser.
55800170204	Carmarthenshire County Council	04/01/2017	Manufacturers/processors	Sections 31 & 43	N/A	"HAM"	The sample consisted of a comminuted formed meat product. The sample was described as 'Ham'. A copy of the food premises menu listed 'ham' in numerous dishes. The sample was found to contain genetic material consistent with meleagris (turkey) only. No porcine (pork) was found present in the sample. However, the definition of 'ham' in the Concise Oxford English Dictionary is 'salted or smoked meat from the upper part of a pig's leg'. I am also of the opinion that the association of this term historically with the average purchaser has been the 'hind leg of a pig (pork)'. The displayed name of a food offered for sale should not falsely describe that food nor be likely to mislead as to the nature of that food, within the meaning of Section 15 of the Food Safety Act 1990. I am therefore, of the opinion that the use of the term 'ham' without

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							any further accompaniment of a non-porcine species would be misleading to the average purchaser.
70400020345	Cheshire and West Chester Council	22/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	LAMB KORMA - NO PEANUTS	<p>The sample was described as containing "no peanuts".</p> <p>The sauce in the meal was analysed for the presence of Peanut protein; this was detected at a level of 3.9 mg/kg.</p> <p>I am of the opinion that this level of peanut protein could be sufficient to induce an allergic reaction in a susceptible person, referencing the European Food Safety Authority document "Scientific Opinion on the evaluation of allergenic foods and food ingredients for labelling purposes".</p> <p>In my opinion the use of the statement "no peanuts" to describe a food containing 3.9 milligrams per kilogram peanut is likely to mislead as the substance of the food.</p> <p>DNA was extracted from the meat in the sample. Seven real-time PCR assays for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse), Gallus gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of those animal species present.</p> <p>The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%) Medium part (30 - 60%) Minor part (5 - 30%) Diminutive part (1 - 5%) Very diminutive part (&lt;1%).</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>The following species was detected in the sample: Beef (major part).</p> <p>Lamb was not detected.</p> <p>On this basis I am of the opinion that the species description "Lamb" applied to the curry is false and misleading.</p>
70400020342	Cheshire and West Chester Council	22/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	LAMB KORMA - NO PEANUTS	<p>The sauce in the meal was analysed for the presence of Peanut protein; this was not detected using a test method with a limit of detection of 1 mg/kg.</p> <p>DNA was extracted from the meat in the sample. Seven real-time PCR assays for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse), Gallus gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of those animal species present.</p> <p>The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows: Major part (60 - 100%) Medium part (30 - 60%) Minor part (5 - 30%) Diminutive part (1 - 5%) Very diminutive part (&lt;1%).</p> <p>The following species was detected in the sample: Beef (major part).</p>



Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>Lamb was not detected.</p> <p>On this basis I am of the opinion that the species description "Lamb" applied to the curry is false and misleading.</p>
40700070550	Coventry City Council	13/07/2017	Retailers	Sections 31 & 43	N/A	LAMB MINCE	<p>The above results showed that the meat had a total volatile nitrogen (TVN) content of 21 milligrams of nitrogen per 100g of meat. The TVN is an index of degradation of the nitrogenous components of the meat. Fresh meat does not normally have a TVN content in excess of 17 milligrams of nitrogen per 100g; the result for this sample was borderline. Species determination carried out via DNA extraction followed by RT-PCR gave positive results for sheep (<i>Ovis aries</i>), cow (<i>Bos taurus</i>), and chicken (<i>Gallus gallus</i>) species in this sample; pig (<i>Sus scrofa</i>) goat (<i>Capra hircus</i>) and horse (<i>Equus caballus</i>) species results were negative. Sheep was the main meat component of the food; cow DNA was present at level greater than 1% and chicken DNA was present at a level of less than 1% but greater than 0.1%. In my opinion, the presence of cow and chicken DNA in lamb mince renders the food not of the substance demanded by the purchaser contrary to the requirements of the Food Safety Act 1990. I further certify that the sample had undergone no change that would affect my results, opinion or observations.</p>
40700070514	Coventry City Council	04/07/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	LAMB SHEESH KEBAB	<p>The above results showed that the meat had a total volatile nitrogen (TVN) content of 32 milligrams of nitrogen per 100g of meat. The TVN is an index of degradation of the nitrogenous components of the meat. Freshly cooked meat does not normally have a TVN content in excess of 17 milligrams of nitrogen per 100g; the result for this sample was</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>unsatisfactory and indicated that some degradation of the meat had occurred. In my opinion, the high TVN level of the meat renders the food not of the quality demanded by the purchaser contrary to the requirements of the Food Safety Act 1990. Species determination carried out via DNA extraction followed by RT-PCR gave positive results for sheep (<i>Ovis aries</i>), cow (<i>Bos taurus</i>) and chicken (<i>Gallus gallus</i>) species in this sample; pig (<i>Sus scrofa</i>), goat (<i>Capra hircus</i>) and horse (<i>Equus caballus</i>) species results were negative. Sheep was the main meat component of the food but both chicken DNA and cow DNA were present at levels greater than 1%. In my opinion, the presence of chicken and cow DNA in a sample described as 'Lamb Sheesh Kebab' renders the food not of the substance demanded by the purchaser contrary to the requirements of the Food Safety Act 1990. I further certify that the sample had undergone no change that would affect my results, opinion or observations.</p>
06100020069	Derbyshire County Council	17/01/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	<p>MEAT USED TO PREPARE LAMB TIKKA MASALA MEAL</p> <p>The sample consisted of a curried meal purchased as a lamb based meal.</p> <p>Analysis of DNA extracted from the sample showed it to consist entirely of beef with no significant amount of sheep meat being detected. I am therefore of the opinion that the sample was not of the substance demanded, contrary to the requirements of Section 14 of the Food Safety Act 1990.</p> <p>The following scale is used to indicate the proportion of DNA in the total DNA measured.</p> <p>Major part (60-100%) Medium part (30-60%)</p>	

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>Minor parts (5-30%)                  Diminutive part (1-5%)                  Very diminutive parts (&lt;1%) (detected but below the reporting limit of the method)                  Not detected</p>
06100020066	Derbyshire County Council	17/01/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	LAMB TIKKA MASALA	<p>The sample consisted of a curried meal purchased as a lamb based meal.</p> <p>Analysis of DNA extracted from the sample showed it to consist entirely of beef with no significant amount of sheep meat being detected. I am therefore of the opinion that the sample was not of the substance demanded, contrary to the requirements of Section 14 of the Food Safety Act 1990.</p> <p>The following scale is used to indicate the proportion of DNA in the total DNA measured.</p> <p>Major part (60-100%)                  Medium part (30-60%)                  Minor parts (5-30%)                  Diminutive part (1-5%)                  Very diminutive parts (&lt;1%) (detected but below the reporting limit of the method)                  Not detected</p>
07102530027	Devon County Council	14/03/2017	Retailers	Sections 31 & 43	N/A	MINCE LAMB	<p>The sample consisted of minced meat described as "Mince Lamb".</p> <p>There was no indication of an excess of collagen or added water, however the fat content was very high to the degree of being excessive when compared to typical figures derived from surveys.</p> <p>Analysis of DNA extracted from the meat showed it to consist principally of sheep meat, but that a significant amount of beef was also present.</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>The Food Standards Agency advice is that values above 1% be regarded as deliberate addition and values below as adventitious contamination.</p> <p>The sample contained an excess of beef (1-5%) and and fat and was therefore not of the substance demanded, contrary to the requirements of Section 14 of the Food Safety Act 1990.</p> <p>The following scale is used to indicate the proportion of DNA in the total DNA measured.</p> <p>Major part (60-100%)          Medium part (30-60%)          Minor parts (5-30%)          Diminutive part (1-5%)          Very diminutive parts (&lt;1%) (detected but below the reporting limit of the method)          Not detected</p>
40900160161	Dudley Metropolitan Borough Council	16/02/2017	Restaurants and other Caterers	Sections 31 & 43	NA	LAMB PASSANDA	<p>DNA was extracted from the meat in the sample. Seven real-time PCR assays for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse), Gallus gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of those animal species present.</p> <p>The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>Medium part (30 - 60%)                  Minor part (5 - 30%)                  Diminutive part (1 - 5%)                  Very diminutive part (&lt;1%)</p> <p>The following species were detected in the sample:                  Beef (major part)                  Sheep was not detected.</p> <p>The sample was described as 'Lamb Passanda'. The meat in the sample consisted of beef and did not contain any lamb. In my opinion lamb passanda should be made with lamb meat.</p> <p>I am therefore of the opinion that the sample was not of the nature demanded by the purchaser.</p>
09100630011	Durham County Council	24/01/2017	Manufacturers/processors	Sections 31 & 43	N/A	PORK SAUSAGE	<p>The sample consisted of a meat product described as "pork sausage".</p> <p>The Products Containing Meat etc (England) Regulations 2014 require the meat portion of a food described as pork sausage to consist entirely of pork. Food Standards Agency advice is that values above 1% should be regarded as deliberate addition. Analysis of DNA extracted from the meat portion of the sample showed it to consist of pork with significant amounts of beef and sheep (above 1%), contrary to the requirements of the Regulations.</p> <p>The following scale is used to indicate the proportion of DNA in the total DNA measured.</p> <p>Major part (60-100%)</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							Medium part (30-60%) Minor parts (5-30%) Diminutive part (1-5%) Very diminutive parts (<1%) (detected but below the reporting limit of the method) Not detected
89500300131	Hereford City Council	25/01/2017	Materials and Articles Manufacturers and Suppliers	Sections 31 & 43	Sections 31 & 43	LAMB DONER KEBAB	The sample was analysed for a range of meat species using DNA techniques. Bovine (cattle) and ovine (sheep) DNA was detected in the sample. The amount of each DNA type was quantified in relation to the amount of total amplified DNA as follows: Bovine DNA = 17.7% of total amplified DNA Ovine DNA = 82.3% of total amplified DNA It is my opinion that a sample described as 'lamb doner' should consist only of lamb meat unless further qualified.
15400067269	Hertfordshire County Council	07/03/2017	Restaurants and other Caterers	Sections 31 & 43	Sections 31 & 43	LAMB DONOR KEBAB	The sample was described as 'Lamb Doner Kebab'. The results show that the sample contains sheep, beef, pork and chicken meat. The amount of sheep and beef meat equated to greater than 10 per cent of the meat and the quantity of pork and poultry present was 1.5% and 4.1% respectively. In my opinion the amounts of beef, pork and poultry meat present is consistent with deliberate inclusion. In my opinion a lamb doner kebab must only contain sheep meat. I am therefore of the opinion that the sample is not of the nature demanded by a purchaser within the meaning of Section 14 of The Food Safety Act 1990.
17800490044	Kent County Council	16/03/2017	Retailers	Sections 31 & 43	N/A	MINCED LAMB	Approximately 20% of the DNA extracted from the sample was of cow origin which was indicative of the presence of meat derived from cow. I am of the opinion that food described as 'minced lamb' should not contain meat derived from cow and that the food was falsely described.

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

17800460537	Kent County Council	10/03/2017	Retailers	Sections 31 & 43	N/A	MINCED LAMB	UNSATISFACTORY - Composition The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Although sheep meat was detected, beef meat was found at a level of greater than 10% and poultry meat was found at 1%. The level of poultry was consistent with contamination or poor handling practices rather than deliberate inclusion. In my opinion, a product described as 'minced lamb' should contain sheep meat only and therefore the presence of beef and poultry renders the sample not of the substance demanded within the meaning of section 14 of the Food Safety Act 1990.
17800490010	Kent County Council	14/03/2017	Retailers	Sections 31 & 43	N/A	LAMB MINCE	UNSATISFACTORY - Composition The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Although sheep meat was detected, pork meat was found at a level of greater than 10% and beef meat was found at 1%. The level of beef was consistent with contamination or poor handling practices rather than deliberate inclusion. In my opinion, a product described as 'minced lamb' should contain sheep meat only and therefore the presence of beef and pork renders the sample not of the substance demanded within the meaning of section 14 of the Food Safety Act 1990.
17800300168	Kent County Council	25/05/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	LAMB TIKKA MASSALA	UNSATISFACTORY - Composition The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Sheep meat was present but beef muscle meat protein was also detected at a level less than 2% but greater than 1%. In my opinion, the product should contain lamb meat only and therefore the presence of beef meat renders the sample

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							not of the substance demanded within the meaning of section 14 of the Food Safety Act 1990.
17800460574	Kent County Council	25/03/2017	Retailers	Sections 31 & 43	N/A	MINCED LAMB	UNSATISFACTORY - Composition The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Although sheep meat was detected, beef meat was found at a level of 18.6% and pork meat was found at 9%. In my opinion, a product described as 'minced lamb' should contain sheep meat only and therefore the presence of beef and pork renders the sample not of the substance demanded within the meaning of section 14 of the Food Safety Act 1990.
17800460543	Kent County Council	10/03/2017	Retailers	Sections 31 & 43	N/A	MINCED LAMB	UNSATISFACTORY - Composition The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Although sheep meat was detected, beef meat was found at a level greater than 10%. In my opinion, a product described as 'minced lamb' should contain sheep meat only and therefore the presence of beef renders the sample not of the substance demanded within the meaning of section 14 of the Food Safety Act 1990.
17800470061	Kent County Council	08/06/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	BALTI ACHARI LAMB	UNSATISFACTORY - Composition The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Both sheep and beef meat were detected in the sample based on the analysis carried out. In my opinion, a product described as 'Balti Achari Lamb' should contain sheep meat only and therefore the sample was not of the substance demanded within the meaning of section 14 of the Food Safety Act 1990.



Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

17800470058	Kent County Council	08/06/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	LAMB CURRY	UNSATISFACTORY - Composition The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Both sheep and beef meat were detected in the sample based on the analysis carried out. In my opinion, a product described as 'Lamb Curry' should contain sheep meat only and therefore the sample was not of the substance demanded within the meaning of section 14 of the Food Safety Act 1990.
17800460513	Kent County Council	10/03/2017	Retailers	Sections 31 & 43	N/A	MINCED LAMB	UNSATISFACTORY - Composition The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Although sheep meat was detected, beef meat was found at a level greater than 10%. In my opinion, a product described as 'minced lamb' should contain sheep meat only and therefore the presence of beef renders the sample not of the substance demanded within the meaning of section 14 of the Food Safety Act 1990.
17800490028	Kent County Council	14/03/2017	Retailers	Sections 31 & 43	N/A	Minced Lamb	UNSATISFACTORY - Composition The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Although sheep meat was detected, beef meat was found at a level of 5.7% and pork meat was found at 7.3%. In my opinion, a product described as 'minced lamb' should contain sheep meat only and therefore the presence of beef and pork renders the sample not of the substance demanded within the meaning of section 14 of the Food Safety Act 1990.
17800460531	Kent County Council	10/03/2017	Retailers	Sections 31 & 43	N/A	MINCED LAMB	UNSATISFACTORY - Composition The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Although sheep meat was detected, beef and pork meat were both

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							found at a level greater than 10%. In my opinion, a product described as 'minced lamb' should contain sheep meat only and therefore the presence of beef and pork renders the sample not of the substance demanded within the meaning of section 14 of the Food Safety Act 1990.
17800460540	Kent County Council	10/03/2017	Retailers	Sections 31 & 43	N/A	MINCED LAMB	UNSATISFACTORY - Composition The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Although sheep meat was detected, beef meat was found at a level of greater than 10% and pork meat was found at 2.1%. The level of pork was consistent with contamination or poor handling practices rather than deliberate inclusion. In my opinion, a product described as 'minced lamb' should contain sheep meat only and therefore the presence of beef and pork renders the sample not of the substance demanded within the meaning of section 14 of the Food Safety Act 1990.
19301220074	Lancashire County Council	09/05/2017	Manufacturers/processors	Sections 31 & 43	N/A	LAMB BALTI	The sample was described as 'Lamb balti'. DNA of cow was detected in the sample. DNA of sheep was not detected in the sample. The results of analysis were consistent with the meat in the food being derived from cow I am of the opinion that the food was falsely described.
50500240195	London Borough of Bromley	01/06/2017	Retailers	Sections 31 & 43	N/A	MINCED LAMB	UNSATISFACTORY - Composition The specimen consisted of red minced meat which was contained within an unmarked plastic bag. This in turn was contained within a sealed plastic bag with an intact seal coded L02581. The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Sheep meat was detected but beef meat was also present at a level greater than 10%. In

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							my opinion, a food described as 'Minced Lamb' should contain sheep meat only. The presence of beef meat renders the food not for the substance demanded by the purchaser within the meaning of section 14 of the Food Safety Act 1990.
22600752690	Norfolk County Council	15/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	Minced lamb prepared with a variety of spices	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present.</p> <p>The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:</p> <p>Sheep (major part)          Chicken (diminutive part)          Beef (minor part)</p> <p>In my opinion, the meat present in a sample described as 'minced lamb prepared with a variety of spices' should consist solely of sheep meat. Consequently, I am of the</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							opinion that the sample was not of the substance demanded.
22600752737	Norfolk County Council	27/04/2017	Retailers	Sections 31 & 43	Sections 31 & 43	Lamb Kebab	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present.</p> <p>The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:</p> <p>Turkey (major part)          Pig (minor part)          Beef (very diminutive part)</p> <p>The following species were detected in a repeat analysis:</p> <p>Turkey (medium part)          Pig (major part)          Beef (very diminutive part)</p> <p>The difference in species ratios may be due to inhomogeneity in the sample.</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>In my opinion, the meat present in a sample described as 'lamb kebab ' should consist solely of sheep meat. Consequently, I am of the opinion that the sample was not of the nature demanded.</p> <p>Peanut was not detected in the sample above the quoted limit of quantification.</p> <p>As a result of the analysis, I am of the opinion that the sample contained egg white protein.</p> <p>Consequently, I am of the opinion that the sample is potentially harmful to consumers who are allergic to egg white protein.</p> <p>Under the terms of the Food Information Regulations 2014 which provide for the execution and enforcement of Regulation (EU) No. 1169/2011 on the provision of food information to consumers, the provision of information on the presence of eggs in food which is prepacked for direct sale is mandatory.</p> <p>The labelling present on the sample did not include any information on the presence of eggs.</p>
41800120677	Oldham Metropolitan Borough Council	28/02/2017	Retailers	Sections 31 & 43	N/A	Minced Lamb	<p><b>UNSATISFACTORY - Composition</b> The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Although sheep meat was detected, beef meat was found at a level of 6.2%. In my opinion, a product described as 'minced lamb' should contain sheep meat only and therefore the presence of beef</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							renders the food not of the substance demanded within the meaning of section 14 of the Food Safety Act 1990.
41800260038	Oldham Metropolitan Borough Council	28/03/2017	Primary Producers	Albion Farm Shop & Cafe	N/A	LAMB MINCE	The sample was described as 'lamb mince'. DNA of cow and sheep was detected in the sample. It was estimated that approximately equal amounts of cow and sheep DNA were present which was indicative of the presence of beef. I am of the opinion that the food was falsely described.
41800120714	Oldham Metropolitan Borough Council	01/03/2017	Retailers	Sections 31 & 43	Sections 31 & 43	250G LAMB MINCE	The sample was described as 'lamb mince'. DNA of cow and sheep was detected in the sample. It was estimated that approximately 40% of the DNA present was of cow origin which was indicative of the presence of beef. I am of the opinion that the food was falsely described.
41800120899	Oldham Metropolitan Borough Council	13/03/2017	Retailers	Sections 31 & 43	Sections 31 & 43	250G LAMB MINCE	The sample was described as 'lamb mince'. DNA of cow, chicken and sheep was detected in the sample. The amount of beef was estimated as approximately 20% and the amount of chicken was estimated as approximately 5%. I am of the opinion that the food was falsely described.
41800260054	Oldham Metropolitan Borough Council	04/07/2017	Retailers	Sections 31 & 43	N/A	MINCED LAMB	Approximately 10% of the DNA extracted from the sample was of cow origin which was indicative of the presence of meat derived from cow. I am of the opinion that food described as 'minced lamb' should not contain meat derived from cow and that the food was falsely described.
41800120680	Oldham Metropolitan Borough Council	28/02/2017	Retailers	Sections 31 & 43	Sections 31 & 43	MINCED LAMB	The sample was described as 'minced lamb'. DNA of cow and sheep was detected in the sample. It was estimated that approximately equal amounts of cow and sheep DNA were present which was indicative of the presence of beef. I am of the opinion that the food was falsely described.

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

41800260034	Oldham Metropolitan Borough Council	28/03/2017	Retailers	Sections 31 & 43	N/A	MINCED LAMB	Approximately 5% of the DNA extracted from the sample was of cow origin which was indicative of the presence of meat derived from cow. I am of the opinion that food described as 'minced lamb' should not contain meat derived from cow and that the food was falsely described.
41800250018	Oldham Metropolitan Borough Council	19/04/2017	Retailers	Sections 31 & 43	N/A	LAMB MINCE	Approximately 20% of the DNA extracted from the sample was of cow origin which was indicative of the presence of meat derived from cow and approximately 5% of the DNA extracted from the sample was of pig origin which was indicative of the presence of meat derived from pig. I am of the opinion that food described as 'minced lamb' should not contain meat derived from cow or pig and that the food was falsely described.
41800120723	Oldham Metropolitan Borough Council	02/03/2017	Retailers	Totties Butchers	N/A	MINCED LAMB	The sample was described as 'lamb mince'. DNA of cow and sheep was detected in the sample. It was estimated that approximately 40% of the DNA present was of cow origin which was indicative of the presence of beef. I am of the opinion that the food was falsely described.
567HQ228800 04157	Rhondda Cynon Taf County Borough Council	09/02/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	LAMB DONER KEBAB	DNA was extracted from the sample. Seven real-time PCR assays for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse), Gallus gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:  Major part (60 - 100%) Medium part (30 - 60%)

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>Minor part (5 - 30%)                  Diminutive part (1 - 5%)                  Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:                  Sheep (major part)                  Beef (minor part)</p> <p>The sample was described as "Lamb Doner Kebab", and was therefore not of the substance demanded, contrary to the requirements of Section 14 of the Food Safety Act 1990.</p>
567HQ228800 04277	Rhondda Cynon Taf County Borough Council	23/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)                  Medium part (30 - 60%)                  Minor part (5 - 30%)                  Diminutive part (1 - 5%)                  Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:                  Beef (major part)                  Sheep (minor part)                  Chicken (diminutive part)</p>



Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							The sample was described as "Lamb sheek kebab", and was therefore not of the substance demanded, contrary to the requirements of Section 14 of the Food Safety Act 1990.
567HQ228800 04184	Rhondda Cynon Taf County Borough Council	14/02/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	LAMB SHEEK	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)                  Medium part (30 - 60%)                  Minor part (5 - 30%)                  Diminutive part (1 - 5%)                  Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:                  Beef (major part)                  Sheep (minor part)                  Chicken (very diminutive part)</p> <p>The sample was described as "Lamb Sheek", and was therefore not of the substance demanded, contrary to the requirements of Section 14 of the Food Safety Act 1990.</p>
567HQ228800 04149	Rhondda Cynon Taf County Borough Council	01/02/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	LAMB SHEEK KEBAB	DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>(Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Sheep (minor part)          Chicken (minor part)</p> <p>The sample was described as "Lamb Sheek Kebab", and was therefore not of the substance demanded, contrary to the requirements of Section 14 of the Food Safety Act 1990.</p>
567HQ228800 04163	Rhondda Cynon Taf County Borough Council	09/02/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	LAMB DONER KEBAB	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>Medium part (30 - 60%)                  Minor part (5 - 30%)                  Diminutive part (1 - 5%)                  Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:                  Sheep (major part)                  Beef (diminutive part)</p> <p>The sample was described as "Lamb Doner Kebab", and was therefore not of the substance demanded, contrary to the requirements of Section 14 of the Food Safety Act 1990.</p>
42400310169	Sefton District Council	16/03/2017	Restaurants and other Caterers	Sections 31 & 43	Sections 31 & 43	KOFTE KEBAB	<p>The sample was described as 'Kofte kebab'. Information from the menu at the point of sale supplied with the sample indicated that lamb was the only meat ingredient. Equal quantities of DNA of cow and sheep were detected in the sample. Chicken DNA was also detected at the limit of detection of 0.1%. The results of analysis were consistent with the product containing equal quantities of meat derived from cow and sheep. I am of the opinion that the food was falsely described</p>
286HQ27180003079	Staffordshire County Council	24/01/2017	Retailers	Sections 31 & 43	N/A	LAMB KEBAB ROUNDS	<p>Species determination carried out via DNA extraction followed by RT-PCR gave positive results for sheep (<i>Ovis aries</i>), cow (<i>Bos taurus</i>) and chicken (<i>Gallus gallus</i>) species in this sample; pig (<i>Sus scrofa</i>), goat (<i>Capra hircus</i>) and horse (<i>Equus caballus</i>) species results were negative. Cow and chicken were both major components (&gt;5% each) of the sample. The product was described as 'Lamb Kebab Rounds'. In my opinion, the presence of chicken and cow DNA in a product described as 'Lamb Kebab Rounds' renders</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							the food not of the substance demanded by the purchaser contrary to the requirements of the Food Safety Act 1990.
89400100028	Thurrock Council	16/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	SMALL LAMB DONOR	Analysis indicates that the sample contains sheep meat, approximately 1% poultry meat and in excess of 10% beef meat. The sample was described as 'Small Lamb Doner'. In my opinion a lamb doner kebab must only contain sheep meat. I am therefore of the opinion that the sample is not of the nature demanded by a purchaser within the meaning of Section 14 of The Food Safety Act 1990. I base my opinion on the Lacors guidance on the composition, description and labelling of doner kebabs published November 2009.
89400100051	Thurrock Council	01/08/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	LAMB DONER	The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Lamb meat was detected but both beef and poultry were also present at concentrations of >10% and 1.7% respectively. In my opinion, a product described as 'Lamb Doner' should contain sheep meat only. I am further of the opinion, therefore, that the presence of both beef and poultry renders the food not of the substance demanded within the meaning of section 14 of the Food Safety Act 1990.
89400100046	Thurrock Council	23/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	REGULAR LAMB DONER	Analysis indicates that the sample contains sheep meat, approximately 2% beef meat and in excess of 2% poultry meat. The sample was described as 'Regular Lamb Doner'. In my opinion a lamb doner kebab must only contain sheep meat. I am therefore of the opinion that the sample is not of the nature demanded by a purchaser within the meaning of Section 14 of The Food Safety Act 1990. I base my opinion on the Lacors guidance on the composition, description and labelling of doner kebabs published November 2009.

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

89400100026	Thurrock Council	16/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	REGULAR LAMB DONOR	Analysis indicates that the sample contains sheep meat, approximately 1.5% pork meat and in excess of 10% beef meat. The sample was described as 'Regular Lamb Doner'. In my opinion a lamb doner kebab must only contain sheep meat. I am therefore of the opinion that the sample is not of the nature demanded by a purchaser within the meaning of Section 14 of The Food Safety Act 1990. I base my opinion on the Lacors guidance on the composition, description and labelling of doner kebabs published November 2009.
89400100024	Thurrock Council	16/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	MEDIUM LAMB DONOR	Analysis indicates that the sample contains sheep meat, and 9% beef meat. The sample was described as 'Medium Lamb Doner'. In my opinion a lamb doner kebab must only contain sheep meat. I am therefore of the opinion that the sample is not of the nature demanded by a purchaser within the meaning of Section 14 of The Food Safety Act 1990. I base my opinion on the Lacors guidance on the composition, description and labelling of doner kebabs published November 2009.
89400100062	Thurrock Council	07/08/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	DONER KEBAB	The analysis of the sample was sub-contracted to Hampshire Scientific Service and their report is transmitted as a pdf. Lamb meat was detected but both beef and pork were also present at concentrations of >10% and 2.0% respectively. In my opinion, a product described as 'Doner Kebab' should contain sheep meat only unless further qualified. A copy of a purchase receipt also described the product as 'Lamb Donner Kebab'. I am further of the opinion that, based on the description provided, the sample was not of the substance demanded within the meaning of section 14 of the Food Safety Act 1990.

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

43300990020	Walsall Metropolitan Borough Council	21/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	SHEEK KEBAB (LAMB)	The sample was analysed for a range of meat species using DNA techniques. Bovine, ovine and chicken DNA was detected in the sample. The amount of each DNA type was quantified in relation to the amount of total amplified DNA as follows: Bovine DNA = 43% of total amplified DNA Ovine DNA = 27% of total amplified DNA Chicken DNA = 30% of total amplified DNA It is my opinion that a sample described as 'lamb sheek kebab' should consist only of lamb meat unless further qualified.
43300960138	Walsall Metropolitan Borough Council	23/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	SHEEK KEBAB (LAMB)	The sample was analysed for a range of meat species using DNA techniques. Bovine, ovine and chicken DNA was detected in the sample. The amount of each DNA type was quantified in relation to the amount of total amplified DNA as follows: Bovine DNA = 99.4% of total amplified DNA Ovine DNA = 0.3% of total amplified DNA Chicken DNA = 0.2% of total amplified DNA It is my opinion that the amount of ovine and chicken DNA found in the sample is consistent with contamination through poor handling practices, and the sample consists of bovine (cattle) meat, contrary to the description provided.
43300960135	Walsall Metropolitan Borough Council	23/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	RANGILA NAN (LAMB)	The sample was analysed for a range of meat species using DNA techniques. Bovine, ovine and chicken DNA was detected in the sample. The amount of each DNA type was quantified in relation to the amount of total amplified DNA as follows: Bovine DNA = 99.2% of total amplified DNA Ovine DNA = 0.2% of total amplified DNA Chicken DNA = 0.6% of total amplified DNA It is my opinion that the amount of ovine and chicken DNA found in the sample is consistent with contamination through poor handling practices, and the

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							sample consists of bovine (cattle) meat, contrary to the description provided.
43300930002	Walsall Metropolitan Borough Council	06/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	SHEEK KEBAB (LAMB)	The sample was analysed for a range of meat species using DNA techniques. Bovine, ovine and chicken DNA was detected in the sample. The amount of each DNA type was quantified in relation to the amount of total amplified DNA as follows: Bovine DNA = 17.8% of total amplified DNA Ovine DNA = 58.7% of total amplified DNA Chicken DNA = 23.5% of total amplified DNA It is my opinion that a sample described as 'lamb sheek kebab' should consist only of lamb meat unless further qualified.
43300960056	Walsall Metropolitan Borough Council	22/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	KEEMA BALTI (LAMB)	The sample was analysed for a range of meat species using DNA techniques. Bovine, ovine and chicken DNA was detected in the sample. The amount of each DNA type was quantified in relation to the amount of total amplified DNA as follows: Bovine DNA = 92.5% of total amplified DNA Ovine DNA = 5.9% of total amplified DNA Chicken DNA = 1.6% of total amplified DNA It is my opinion that a sample described as 'Keema Balti (Lamb)' should consist only of lamb meat unless further qualified.
322HQINET0102999	West Sussex County Council	20/01/2017	Retailers	Sections 31 & 43	N/A	LAMB/MUTTON MINCE	DNA was extracted from the sample. Seven real-time PCR assays for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Lamb), Capra hircus (Goat), Equus caballus (Horse), Gallus gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of those animal species present.  The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>follows:  Major part (60 - 100%)  Medium part (30 - 60%)  Minor part (5 - 30%)  Diminutive part (1 - 5%)  Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:  Beef (medium part)  Chicken (medium part)  Lamb (minor part).</p> <p>The food was described as Lamb/Mutton mince. Based on the analysis of this sample it was a mixture of Beef, Chicken and Lamb mince. I am therefore of the opinion that the food was misdescribed.</p>
322HQINET01 03001	West Sussex County Council	20/01/2017	Retailers	Sections 31 & 43	N/A	GOAT	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Lamb), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present.</p> <p>The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:  Major part (60 - 100%)  Medium part (30 - 60%)  Minor part (5 - 30%)  Diminutive part (1 - 5%)  Very diminutive part (&lt;1%).</p> <p>The following species were detected in the</p>



Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>sample: Beef (major part) Lamb (very diminutive part).</p> <p>The food was described as Goat. Based on the analysis of this sample it was Beef with less than 1% of Lamb. I am therefore of the opinion that the description "Goat" was false and misleading.</p>
322HQINET0103529	West Sussex County Council	23/02/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	<p>The pizza was described as Cheese, Tomato and Ham.</p> <p>DNA was extracted from the meat part of the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present.</p> <p>The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows: Major part (60 - 100%) Medium part (30 - 60%) Minor part (5 - 30%) Diminutive part (1 - 5%) Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample: Turkey (major part) Beef (very diminutive part).</p> <p>I am of the opinion that meat sold as "Ham" without further description should consist</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>solely of Pork. The sample contained Turkey and a trace of Beef and as such I am further of the opinion that the meat on the sample is misdescribed.</p> <p>The fat portion of the "cheese" portion of the sample was analysed for n-butyric acid content. n-Butyric acid is a short chain fatty acid associated with milk fat but not with other edible fats and oils at a level typically between 3.2 and 3.66, with a European Union recognised factor of 3.42.</p> <p>The amount of n-butyric acid determined in the fat was not consistent with the "cheese" portion being cheese, but a mixture of cheese and a substitute containing other fats or oils such as vegetable oil.</p> <p>The sample was described as "cheese, tomato and ham" and therefore I am of the opinion that the topping on the sample is misdescribed.</p>
43700250465	West Yorkshire Council	08/03/2017	Retailers	Sections 31 & 43	N/A	<p>1kg Goat meat</p> <p>The results above demonstrate that the sample contains meat from sheep and none from goat.</p> <p>In my opinion a food described as Goat Meat must not contain meat from sheep and must contain meat solely from goat.</p> <p>I am further of the opinion that the sample was not of the nature demanded within the meaning of Section 14 of the Food Safety Act 1990.</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

43700212125	West Yorkshire Council	15/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	1 x tropicana ham and pineapple pizza	<p>The cooked cured meat contained no DNA of pig origin. The presence of DNA from turkey indicates that the material is cured poultry product. In my opinion the word ham, when used as part of a food name without qualification, can refer only to cured meat from the hind leg of a pig.</p> <p>The fat extracted from the cheese-like material was found to be only two thirds milk fat. Fat from cheese consists entirely of milk fat and the result demonstrates that the cheese was not cheese but a mixture of cheese, non-dairy fat and possibly other ingredients. In my opinion it is customary for cheese rather than a mixture of cheese and substitute material to be used on pizza.</p> <p>I am further of the opinion that the sample was not of the substance demanded within the meaning of Section 14 of the Food Safety Act 1990.</p>
14402140017	Worcestershire County Council	16/01/2017	Retailers	Sections 31 & 43	N/A	GOAT	<p>The sample was analysed for a range of meat species using DNA techniques, DNA from ovine (sheep) species only was detected in the sample, contrary to the description provided.</p>
14402200002	Worcestershire County Council	27/01/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	CURRIED GOAT	<p>The sample was analysed for the presence of a range of meat species using DNA techniques, bovine (cattle), ovine (sheep) and chicken DNA was detected in the sample.</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>The amount of sheep and chicken DNA found in the sample (&lt;1% each of total amplified DNA) is consistent with contamination through poor handling practices rather than deliberate inclusion. Bovine DNA amounted to more than 99% of total amplified DNA. It is my opinion that a food described as 'curried goat' should consist of goat meat only, this sample contained meat of bovine origin only, contrary to the description provided.</p>
80100202771	Antrim Borough Council	14/08/2017	Retailers	Sections 31 & 43	N/A	LEAN MINCE STEAK	<p>DNA was extracted from the sample. Five real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Pork (minor part)</p> <p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Sheep (diminutive part)</p> <p>The sample was described as "Lean mince steak" and was therefore not of the substance demanded, contrary to the requirements of Article 13 of the Food Safety (Northern Ireland) Order 1991.</p>
80200263664	Ards and North Down Borough Council	24/01/2017	Manufacturers mainly selling by retail	Sections 31 & 43	N/A	<p>STEAK SAUSAGES</p> <p>The apparent meat content of the sample was satisfactory; the level of sulphur dioxide preservative found was not excessive.</p> <p>DNA was extracted from the sample. Seven real-time PCR assays specific for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of animal DNA present. Using the detected signals, all species DNA amounts present in the sample are calculated as relative values (%), related to the total amount of determined DNA, and are given in semi-quantitative ranges:</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>Major part (60 - 100%)                  Medium part (30 - 60%)                  Minor part (5 - 30%)                  Diminutive part (1 - 5%)                  Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:                  Beef (major part)                  Pork (minor part)                  Sheep (very diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 do not prohibit the presence of other species of meat in Beef sausages, however if the proportions of added pork and lamb were sufficient to characterise the food then this would have implications for the name, and all species of meat deliberately added require a separate QUID declaration.</p> <p>Information must be available for consumers regarding allergenic ingredients such as sulphites or cereals containing gluten used in the product.</p>
80200263689	Ards and North Down Borough Council	24/01/2017	Manufacturers mainly selling by retail	Sections 31 & 43	N/A	<p>PORK SAUSAGES</p> <p>The apparent meat content of the sample was satisfactory; the level of sulphur dioxide preservative found was not excessive.</p> <p>DNA was extracted from the sample. Seven real-time PCR assays specific for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of animal DNA. present. Using the detected signals, all</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>species DNA amounts present in the sample are calculated as relative values (%), related to the total amount of determined DNA, and are given in semi-quantitative ranges:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Pork (major part)          Sheep (minor part)          Beef (very diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 require pork sausages to contain meat from pigs only.</p>
80200264356	Ards and North Down Borough Council	01/03/2017	Retailers	Sections 31 & 43	N/A	<p>DNA was extracted from the sample. Seven real-time PCR assays for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse), Gallus gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>BEEF BURGERS</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>The following species were detected in the sample:                  Beef (major part)                  Pork (diminutive part)                  Sheep (diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 do not prohibit the use of pork and lamb in beef burgers, however the proportions found in total are sufficient to characterise the food, and the name "Beef burgers" is insufficiently precise to inform a purchaser of its true nature.</p> <p>The apparent meat content of the sample was satisfactory. The QUID declaration made was however 2% lower than the minimum standard of 62% beef specified for beef burgers; this is not acceptable. This meat product must be labelled with a QUID declaration of the proportion of each species of meat used in it.</p> <p>Information must be available for consumers regarding allergenic ingredients such as sulphites or cereals containing gluten used in the product.</p>
80200264287	Ards and North Down Borough Council	27/02/2017	Retailers	Sections 31 & 43	N/A	BEEF SAUSAGE	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in</p>



Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Pork (minor part)          Sheep (minor part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 do not prohibit the use of pork and lamb in beef sausages, however the proportions found are sufficient to characterise the food, and the name "Beef sausages" is insufficiently precise to inform a purchaser of its true nature. Additionally this meat product must be labelled with a QUID declaration of the proportion of each species of meat used in it.</p> <p>The apparent meat content of the sample was 13% lower than the QUID declaration made for beef content, a deficiency equivalent to 16.3% of the declared content; this is unsatisfactory. Information must be available for consumers regarding allergenic ingredients such as sulphites or cereals containing gluten used in the product.</p>
80200264405	Ards and North Down Borough Council	02/03/2017	Retailers	Sections 31 & 43	N/A	<p>BEEF SAUSAGES</p> <p>DNA was extracted from the sample. Seven real-time PCR assays for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse), Gallus gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Pork (minor part)          Sheep (very diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 do not prohibit the use of lamb and pork in beef sausages, however the proportion of pork found is sufficient to characterise the food, and the name "Beef sausages" is insufficiently precise to inform a purchaser of its true nature.</p> <p>This meat product must be labelled with a QUID declaration of the proportion of each species of meat used in it. Information must also be available for consumers regarding allergenic ingredients such as sulphites or cereals containing gluten used in the product.</p>
80200264393	Ards and North Down Borough Council	01/03/2017	Retailers	Sections 31 & 43	N/A	<p>BEEF BURGERS</p> <p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus</i></p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Sheep (minor part)          Pork (diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 do not prohibit the use of lamb and pork in beef burgers, however the proportion of lamb found is sufficient to characterise the food, and the name "Beef burgers" is insufficiently precise to inform a purchaser of its true nature.</p> <p>This meat product must be labelled with a QUID declaration of the proportion of each species of meat used in it. Information must also be available for consumers regarding allergenic ingredients such as sulphites or cereals containing gluten used in the product.</p>	
80200264360	Ards and North Down	01/03/2017	Retailers	Sections 31 & 43	N/A	BEEF SAUSAGES	DNA was extracted from the sample. Seven real-time PCR assays for Bos taurus (Beef),

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

	Borough Council						<p>Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse), Gallus gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Pork (diminutive part)          Sheep (very diminutive part)          Chicken (very diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 do not prohibit the use of pork, lamb and chicken in beef sausages. The apparent meat content of the sample was satisfactory. This meat product must however be labelled with a QUID declaration of the proportion of each species of meat used in it. Information must also be available for consumers regarding allergenic ingredients such as sulphites or cereals containing gluten used in the product.</p>
80200264381	Ards and North Down Borough Council	01/03/2017	Retailers	Sections 31 & 43	N/A	STEAK MINCE	<p>DNA was extracted from the sample. Seven real-time PCR assays for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse), Gallus</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Pork (minor part)</p> <p>The sample was described as "Steak mince" and was therefore not of the substance demanded, contrary to the requirements of Article 13 of the Food Safety (Northern Ireland) Order 1991.</p> <p>The composition of the sample complied with the maximum fat and collagen / meat protein ratio (daily averages) specified for minced beef by Regulation (EU) No 1169/2011 Annex VI Part B.</p> <p>Current advice from DEFRA is that, for the moment, while this is being discussed at European level, the expressions required by point 2 of Part B (percentage of fat content under ...' and 'collagen/meat protein ratio under ...'. ) are not regarded as necessary for minced beef which is not sold pre-packed.</p>
--	--	--	--	--	--	--

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

80200264389	Ards and North Down Borough Council	01/03/2017	Retailers	Sections 31 & 43	N/A	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Sheep (minor part)          Pork (diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 do not prohibit the use of lamb and pork in beef sausages, however the proportion of lamb found is sufficient to characterise the food, and the name "Beef sausages" is insufficiently precise to inform a purchaser of its true nature.</p> <p>This meat product must be labelled with a QUID declaration of the proportion of each species of meat used in it. Information must also be available for consumers regarding allergenic ingredients</p>
-------------	-------------------------------------	------------	-----------	------------------	-----	--

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							such as sulphites or cereals containing gluten used in the product.
80200263677	Ards and North Down Borough Council	24/01/2017	Manufacturers mainly selling by retail	Sections 31 & 43	N/A	BEEF BURGERS	<p>The apparent meat content of the sample was satisfactory; the level of sulphur dioxide preservative found was not excessive.</p> <p>DNA was extracted from the sample. Seven real-time PCR assays specific for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of animal DNA present. Using the detected signals, all species DNA amounts present in the sample are calculated as relative values (%), related to the total amount of determined DNA, and are given in semi-quantitative ranges:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (medium part)          Pork (medium part)</p> <p>The name "Beef burgers" is insufficiently precise for a burger containing approximately equal proportions of beef and pork. Furthermore, the product must be labelled with QUID declarations of beef content and pork content.</p> <p>Information must be available for consumers regarding allergenic ingredients such as</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>sulphites or cereals containing gluten used in the product.</p>
80200264336	Ards and North Down Borough Council	01/03/2017	Retailers	Sections 31 & 43	N/A	PORK SAUSAGES	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Pork (major part)          Sheep (minor part)          Beef (very diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 require pork sausages to contain meat from pigs only. In addition to bearing a revised name to reflect its composition, this meat product must be labelled with a QUID declaration of the proportion of each species of meat used in it. Information must also be available for consumers regarding allergenic ingredients such as sulphites or cereals containing gluten used in the product.</p>



Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

80200263681	Ards and North Down Borough Council	24/01/2017	Manufacturers mainly selling by retail	Sections 31 & 43	N/A	STEAK BURGERS	<p>The apparent meat content of the sample was 6% lower than the QUID declaration made for beef content, a deficiency equivalent to 6.3% of the declared content; this is unsatisfactory.</p> <p>DNA was extracted from the sample. Seven real-time PCR assays specific for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of animal DNA present. Using the detected signals, all species DNA amounts present in the sample are calculated as relative values (%), related to the total amount of determined DNA, and are given in semi-quantitative ranges:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Pork (diminutive part)          Sheep (very diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 do not prohibit the presence of other species of meat in Steak Burgers, however if the proportions of added pork and lamb were sufficient to characterise the food then this would have implications for the name, and all species of</p>
-------------	-------------------------------------	------------	--	------------------	-----	---------------	---

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							meat deliberately added require a separate QUID declaration.
80200263685	Ards and North Down Borough Council	24/01/2017	Manufacturers mainly selling by retail	Sections 31 & 43	N/A	BEEF SAUSAGES	<p>The apparent meat content of the sample was satisfactory; the level of sulphur dioxide preservative found was not excessive.</p> <p>DNA was extracted from the sample. Seven real-time PCR assays specific for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of animal DNA present. Using the detected signals, all species DNA amounts present in the sample are calculated as relative values (%), related to the total amount of determined DNA, and are given in semi-quantitative ranges:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Pork (minor part)          Sheep (very diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 do not prohibit the presence of other species of meat in Beef Sausages, however if the proportions of added pork and lamb were sufficient to characterise the food then this would have implications for the name, and all species of</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							meat deliberately added require a separate QUID declaration.
80200264319	Ards and North Down Borough Council	28/02/2017	Manufacturers mainly selling by retail	Sections 31 & 43	N/A	STEAK SAUSAGES	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Sheep (diminutive part)          Pork (very diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 do not prohibit the use of pork and lamb in beef sausages, however this meat product must be labelled with a QUID declaration of the proportion of each species of meat used in it.</p> <p>The apparent meat content of the sample was satisfactory, however the QUID declaration made must include an indication of the species to which it relates. Information must be available for consumers regarding</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							allergenic ingredients such as sulphites or cereals containing gluten used in the product.
80200263702	Ards and North Down Borough Council	24/01/2017	Retailers	Sections 31 & 43	N/A	PORK SAUSAGES	<p>The apparent meat content of the sample was satisfactory; the level of sulphur dioxide preservative found was not excessive.</p> <p>DNA was extracted from the sample. Seven real-time PCR assays specific for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse), Gallus gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of animal DNA. present. Using the detected signals, all species DNA amounts present in the sample are calculated as relative values (%), related to the total amount of determined DNA, and are given in semi-quantitative ranges:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Pork (major part)          Sheep (minor part)          Beef (very diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 require pork sausages to contain meat from pigs only.</p>
80200264328	Ards and North Down Borough Council	28/02/2017	Manufacturers mainly selling by retail	Sections 31 & 43	N/A	PORK SAUSAGES	<p>DNA was extracted from the sample. Seven real-time PCR assays for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse), Gallus gallus (Chicken) and Meleagris gallopavo</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>(Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Pork (major part)          Beef (diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 require pork sausages to contain meat from pigs only. In addition to bearing a revised name to reflect its composition, this meat product must be labelled QUID declarations of pork and beef content. Information must also be available for consumers regarding allergenic ingredients such as sulphites or cereals containing gluten used in the product.</p>
807006224422	Belfast City Council	17/02/2017	Manufacturers mainly selling by retail	Sections 31 & 43	Sections 31 & 43	LAMB BURGERS	<p>DNA was extracted from the sample. Seven real-time PCR assays for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse), Gallus gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Sheep (medium part)          Beef (minor part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 do not prohibit the presence of beef in lamb burgers, however the proportion of beef found is sufficient to partially characterise the food. On this basis the name "Lambburgers" is insufficiently precise to inform a purchaser of its true nature. This meat product must be labelled with QUID declarations of both lamb content and beef content.</p> <p>The allergen gluten was detected in the sample; information must also be available for consumers regarding allergenic ingredients such as sulphites or cereals containing gluten used in the product.</p>	
807006224417	Belfast City Council	17/02/2017	Manufacturers mainly selling by retail	Sections 31 & 43	Sections 31 & 43	LAMB SAUSAGES	<p>DNA was extracted from the sample. Seven real-time PCR assays for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse), Gallus gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Sheep (medium part)          Beef (medium part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 do not prohibit the presence of beef in lamb sausages, however the proportion of beef found is sufficient to partially characterise the food. On this basis the name "Lamb sausages" is insufficiently precise to inform a purchaser of its true nature. This meat product must be labelled with QUID declarations of both lamb content and beef content. Information must also be available for consumers regarding allergenic ingredients such as sulphites or cereals containing gluten used in the product.</p>
80700560281	Belfast City Council	01/09/2017	Retailers	Sections 31 & 43	Sections 31 & 43	BEEF MINCE	<p>DNA was extracted from the sample. Five real-time PCR assays for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Sheep (diminutive part)</p> <p>The sample was described as "Beef mince", and was therefore not of the substance demanded, contrary to the requirements of Article 13 of the Food Safety (Northern Ireland) Order 1991.</p>
89800170051	Blackpool Council	02/08/2017	Restaurants and other Caterers	Sections 31 & 43	Sections 31 & 43	Lamb Korma	<p>I would expect the meat ingredient of a meat product described as 'lamb korma' to be derived only from sheep unless otherwise qualified. DNA of sheep was not detected in the sample. DNA of cow was detected in the sample. I am of the opinion that the meat of the sample was derived from cow and that the food was not of the nature demanded by the purchaser.</p>
882HQINET0103023	Bracknell Forest Unitary Authority	20/01/2017	Retailers	Sections 31 & 43	Sections 31 & 43	FREE RANGE BEEF AND RED ONION	<p>The sample was analysed for the presence of a range of meat species using DNA techniques, bovine (cattle) and porcine (pig) DNA was detected in the sample. The amount of amplified DNA from bovine and porcine species was quantified in relation to the amount of total amplified DNA as follows: Bovine DNA amounted to 91.3% of the total amplified DNA Porcine DNA amounted to 8.7% of the total amplified DNA In my opinion, the amount of bovine DNA found in the sample is consistent with deliberate</p>



Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							inclusion. It is my further opinion that a food described as a beef sausage should consist only of bovine meat unless further qualified.
882HQINET01 03617	Bracknell Forest Unitary Authority	07/03/2017	Retailers	Sections 31 & 43	Sections 31 & 43	FREE RANGE BEEF AND RED ONION	The sample was analysed for a range of meat species using DNA techniques. Bovine (cattle) and porcine (pig) DNA was detected in the sample. The amount of each DNA type was quantified in relation to the amount of total amplified DNA as follows: Bovine DNA = 91.8% of total amplified DNA Porcine DNA = 8.2% of total amplified DNA It is my opinion that a sample described as 'beef and red onion sausages' should consist only of beef meat unless further qualified. I am therefore of the further opinion, that the sample is not of the nature demanded within the meaning of the Food Safety Act 1990.
55300610002	Bridgend County Borough Council	20/01/2017	Retailers	Sections 31 & 43	Sections 31 & 43	MINCED STEAK	The food was sold not prepacked i.e. loose (appendix image 1). All of the submitted minced meat was homogenised together in order to form the sample for analysis. Regulation (EU) No 1169/2011, enforced by the Food Information (Wales) Regulations 2014 specifies designations of minced meat with compositional standards for each designation. The designation 'minced pure beef' has a compositional standard (based on a daily average) in that it must not contain more than 20 percent fat and a collagen/meat protein ratio of no more than 15 percent. Both the fat content and collagen/meat protein ratio found by analysis were each below these compositional standard maximum values for 'minced pure beef'. Analysis found no sulphur dioxide (preservative) above the limit of detection of the analytical method employed. I am subsequently of the opinion that the results of these applied tests were satisfactory. However, the sample was found

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							to contain genetic material consistent with bovine (beef) and porcine (pork). Quantified DNA analysis estimate of the amounts by determining the normalised ratio of the target species DNA copy number to the total copy numbers (bovine, ovine, porcine, gallus, meleagris and horse equine). The copy number ratio of the porcine and all species indicates that as a best estimate based on the DNA extraction variability between different types of tissues, the level of porcine is between 5-10% of the meat component. I am therefore of the opinion that the sample is predominantly beef which contains a moderate level of pork. I am also of the opinion that a food inferred as 'beef' from the use of the common term 'steak' in the name should consist entirely of beef. Furthermore, I am of the opinion that it would be prudent for such a name to include a reference to the animal species (for example 'minced beef steak') in order to ensure that all purchasers/consumers are fully informed.
875HQINET0105100	Brighton and Hove City Council	30/08/2017	Retailers	Sections 31 & 43	N/A	GOAT	UNSATISFACTORY - Composition The sample was sub-contracted to Worcestershire Scientific Services for the analysis. Their report is attached as a pdf. The sample was analysed for the presence of both ovine (sheep) and caprine (goat) DNA but only ovine DNA was detected. In my opinion, the presence of sheep meat and absence of goat renders the food not of the nature demanded within the meaning of section 14 of the Food Safety Act 1990.
40500010592	Bury Metropolitan Borough Council	14/02/2017	Retailers	Sections 31 & 43	Sections 31 & 43	MINCED BEEF	The sample was described as 'beef mince'. DNA of cow and chicken was detected in the sample. The amount of chicken meat was estimated as approximately 2% and I am of

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							the opinion that the food was not of the nature demanded by the purchaser.
80900290831	Castlereagh Borough Council	19/04/2017	Manufacturers mainly selling by retail	Sections 31 & 43	Sections 31 & 43	STEAK MINCE	<p>The sample contained 675 mg/kg of sulphur dioxide preservative. The Food Additives, Flavourings, Enzymes and Extraction Solvents Regulations (Northern Ireland) 2013 and Regulation (EC) No 1333/2008 do not permit the use of this additive in fresh meat, including steak mince.</p> <p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Pork (minor part)          Sheep (very diminutive part)</p> <p>The sample was described as "Steak mince" and was therefore not of the substance demanded, contrary to the requirements of Article 13 of the Food Safety (Northern</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>Ireland) Order 1991.</p> <p>The composition of the sample complied with the maximum fat and collagen / meat protein ratio (daily averages) specified for minced beef by Regulation (EU) No 1169/2011 Annex VI Part B. However the above results are consistent with the presence of 8% of extraneous water in the sample. Furthermore, the level of fat found exceeds that indicated at the point of sale (7%).</p> <p>Current advice from DEFRA is that, for the moment, while this is being discussed at European level, the expressions required by point 2 of Part B (percentage of fat content under ...' and 'collagen/meat protein ratio under ...'. ) are not regarded as necessary for minced beef which is not sold pre-packed.</p>
80900290843	Castlereagh Borough Council	19/04/2017	Manufacturers mainly selling by retail	Sections 31 & 43	Sections 31 & 43	BEEF VEG ROLL	<p>The sulphur dioxide preservative content of the sample was 615 mg/kg higher than the maximum limit of 450 mg/kg permitted in sausagemeat by The Food Additives, Flavourings, Enzymes and Extraction Solvents Regulations (Northern Ireland) 2013 and Regulation (EC) No 1333/2008.</p> <p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>Major part (60 - 100%)                  Medium part (30 - 60%)                  Minor part (5 - 30%)                  Diminutive part (1 - 5%)                  Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:                  Beef (medium part)                  Pork (medium part)                  Sheep (diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 do not prohibit the presence of pork and lamb in beef sausages. However, the proportions found in the sample are sufficient to characterise the product, and the name "Beef veg roll" is insufficiently precise to inform a purchaser of its true nature. Furthermore, a QUID declaration must be made of the proportion of each species of meat used in the product.</p>
80900290834	Castlereagh Borough Council	19/04/2017	Manufacturers mainly selling by retail	Sections 31 & 43	Sections 31 & 43	PORK AND LEEK SAUSAGES	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)                  Medium part (30 - 60%)                  Minor part (5 - 30%)</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>Diminutive part (1 - 5%) Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample: Pork (major part) Sheep (diminutive part) Beef (very diminutive part)</p> <p>The Products Containing Meat etc. Regulations (Northern Ireland) 2014 require pork sausages to contain meat from pigs only. The sausages were stated to have natural sheep casings, however the proportion of sheep DNA found in the sausagemeat was too high to be attributable to that source alone.</p> <p>The apparent meat content of the sample was satisfactory.</p>
07102680059	Devon County Council	17/01/2017	Retailers	Sections 31 & 43	N/A	<p>The sample consisted of minced meat described as "Beef Mince".</p> <p>There was no indication of an excess of collagen, fat or added water.</p> <p>Analysis of DNA extracted from the meat showed it to consist principally of beef, but that a significant amount of sheep meat was also present.</p> <p>The Food Standards Agency advice is that values above 1% be regarded as deliberate addition and values below as adventitious contamination. The sample contained an excess of sheep meat (1-5%) and was therefore not of the substance demanded, contrary to the requirements of Section 14 of the Food Safety Act 1990.</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>The following scale is used to indicate the proportion of DNA in the total DNA measured.</p> <p>Major part (60-100%)          Medium part (30-60%)          Minor parts (5-30%)          Diminutive part (1-5%)          Very diminutive parts (&lt;1%) (detected but below the reporting limit of the method)          Not detected</p>
07102650007	Devon County Council	24/03/2017	Manufacturers/processors	Sections 31 & 43	N/A	<p>ABERDEEN          ANGUS          MINCED          STEAK</p>	<p>The apparent meat content, was satisfactory and there was no indication of excess fat, connective tissue or added water. Analysis of DNA extracted from the meat showed it to consist principally of beef, but that a significant amount of sheep meat was also.</p> <p>The Food Standards Agency advice is that values above 1% be regarded as deliberate addition and values below as adventitious contamination. The sample contained an excess of sheep meat (1-5%) and was therefore not of the substance demanded, contrary to the requirements of Section 14 of the Food Safety Act 1990.</p> <p>The following scale is used to indicate the proportion of DNA in the total DNA measured.</p> <p>Major part (60-100%)          Medium part (30-60%)          Minor parts (5-30%)          Diminutive part (1-5%)          Very diminutive parts (&lt;1%) (detected but</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							below the reporting limit of the method) Not detected
08200040483	Dorset County Council	27/02/2017	Manufacturers/processors	Sections 31 & 43	Sections 31 & 43	BEEF MINCE	<p>Analysis of DNA extracted from the meat showed it to consist principally of beef, but that a significant amount of pork was also present.</p> <p>The Food Standards Agency advice is that values above 1% be regarded as deliberate addition and values below as adventitious contamination. The sample contained an excess of pork (1-5%) and was therefore not of the substance demanded, contrary to the requirements of Section 14 of the Food Safety Act 1990.</p> <p>The following scale is used to indicate the proportion of DNA in the total DNA measured.</p> <p>Major part (60-100%) Medium part (30-60%) Minor parts (5-30%) Diminutive part (1-5%) Very diminutive parts (&lt;1%) (detected but below the reporting limit of the method) Not detected</p>
40900090288	Dudley Metropolitan Borough Council	20/01/2017	Retailers	Sections 31 & 43	N/A	DICED GOAT MEAT	<p>DNA was extracted from the sample. Seven real-time PCR assays for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse), Gallus gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of those animal species present.</p> <p>The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species</p>



Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%)</p> <p>The following species were detected in the sample:          Sheep (major part)</p> <p>The only species detected was sheep. Goat was not detected.</p> <p>The sample was described as 'Diced Goat Meat'. In my opinion the sample consisted of meat from sheep and did not contain any goat meat.</p> <p>I am therefore of the opinion that the sample was not of the nature demanded by the purchaser.</p>
40900090282	Dudley Metropolitan Borough Council	19/01/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	<p>GOAT CURRY</p> <p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present.</p> <p>The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>Major part (60 - 100%)                  Medium part (30 - 60%)                  Minor part (5 - 30%)                  Diminutive part (1 - 5%)                  Very diminutive part (&lt;1%)</p> <p>The following species were detected in the sample:                  Sheep (major part)</p> <p>The only species detected was sheep. Goat was not detected.</p> <p>The sample was described as 'Goat Curry'. In my opinion the sample consisted of meat from sheep and did not contain any goat meat.</p> <p>I am therefore of the opinion that the sample was not of the nature demanded by the purchaser.</p>
40900090279	Dudley Metropolitan Borough Council	16/01/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	<p>DNA was extracted from the sample. Seven real-time PCR assays for Bos taurus (Beef), Sus scrofa (Pork), Ovis aries (Sheep), Capra hircus (Goat), Equus caballus (Horse), Gallus gallus (Chicken) and Meleagris gallopavo (Turkey) were then applied to detect and measure the amount of those animal species present.</p> <p>The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)                  Medium part (30 - 60%)                  Minor part (5 - 30%)                  Diminutive part (1 - 5%)</p> <p>SPECIAL CURRY GOAT</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>Very diminutive part (&lt;1%)</p> <p>The following species were detected in the sample:                  Sheep (major part)</p> <p>The only species detected was sheep. Goat was not detected.</p> <p>The sample was described as 'Special Curry Goat'. In my opinion the sample consisted of meat from sheep and did not contain any goat meat.</p> <p>I am therefore of the opinion that the sample was not of the nature demanded by the purchaser.</p>
09100630002	Durham County Council	18/01/2017	Manufacturers/processors	Sections 31 & 43	Sections 31 & 43	PORK AND LEEK SAUSAGE	<p>The sample consisted of a meat product described as "pork and leek sausage".</p> <p>The Products Containing Meat etc (England) Regulations 2014 require the meat portion of a food described as pork sausage to consist entirely of pork. Food Standards Agency advice is that values above 1% should be regarded as deliberate addition. Analysis of DNA extracted from the meat portion of the sample showed it to consist of pork with significant amounts of sheep (above 1%), contrary to the requirements of the Regulations.</p> <p>The following scale is used to indicate the proportion of DNA in the total DNA measured.</p> <p>Major part (60-100%)                  Medium part (30-60%)                  Minor parts (5-30%)</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>Diminutive part (1-5%)                  Very diminutive parts (&lt;1%) (detected but below the reporting limit of the method)                  Not detected</p>
10001440417	East Sussex County Council	19/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	Bagalore Duck	<p>DNA was extracted from the sample. Eight real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken), <i>Anas</i> species (Duck) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present.</p> <p>The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:                  Major part (60 - 100%)                  Medium part (30 - 60%)                  Minor part (5 - 30%)                  Diminutive part (1 - 5%)                  Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:                  Sheep (major part)                  Chicken (very diminutive part).</p> <p>Duck was not detected in the sample.</p> <p>On this basis the species description "Duck" applied to the meat in the meal is false and misleading.</p>
15400067229	Hertfordshire County Council	08/03/2017	Retailers	Sections 31 & 43	N/A	SMOKY BBQ PULLED PORK	<p>The trade label bore the name 'Smoky BBQ Pulled Pork' and 'Formed pork with added water, marinated and cooked using a blend of herbs and spices'. In my opinion the name implies to a purchaser that the meat used in</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							the manufacture of the food is solely pork. Analysis shows that the sample contains both pork and beef meat. In my opinion the amount of beef is consistent with deliberate inclusion. The list of ingredients bore no indication as to the presence of beef meat or other bovine derived ingredients. I am therefore of the opinion that the trade label falsely describes the food within the meaning of Section 15 of the Food Safety Act 1990.
52600510002	London Borough of Redbridge	06/03/2017	Retailers	Sections 31 & 43	N/A	MIXED GOAT MEAT	<p>The sample was analysed for the presence of DNA from beef (<i>Bos taurus</i>), pork (<i>Sus scrofa</i>), lamb/sheep (<i>Ovis aries</i>), goat (<i>Capra hircus</i>), horse (<i>Equus caballus</i>), chicken (<i>Gallus gallus</i>) and turkey (<i>Meleagris gallopavo</i>), using a semi-quantitative method (real-time PCR). The method estimates the proportion of DNA of each species in the total DNA from all the tested species. The method has a detection limit of 0.1% and a quantification limit of 1%.</p> <p>Of these seven species, the only DNA detected showed that the sample consisted of sheep meat (<i>Ovis aries</i>), and not goat meat as described.</p> <p>The sample is therefore not of the nature demanded, contrary to the Food Safety Act 1990.</p>
52600510005	London Borough of Redbridge	06/03/2017	Retailers	Sections 31 & 43	N/A	GOAT MEAT	<p>The sample was analysed for the presence of DNA from beef (<i>Bos taurus</i>), pork (<i>Sus scrofa</i>), lamb/sheep (<i>Ovis aries</i>), goat (<i>Capra hircus</i>), horse (<i>Equus caballus</i>), chicken (<i>Gallus gallus</i>) and turkey (<i>Meleagris gallopavo</i>), using a semi-quantitative method (real-time PCR). The method estimates the proportion of DNA of each species in the total DNA from all the tested species. The method</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>has a detection limit of 0.1% and a quantification limit of 1%.</p> <p>Of these seven species, the only DNA detected showed that the sample consisted of sheep meat (<i>Ovis aries</i>), and not goat meat as described.</p> <p>The sample is therefore not of the nature demanded, contrary to the Food Safety Act 1990.</p>
865HQINET0103150	North East Lincolnshire Council	18/01/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	<p>Meat from the sample was analysed for the presence of DNA from cow (<i>Bos taurus</i>), pig (<i>Sus scrofa</i>), sheep (<i>Ovis aries</i>), horse (<i>Equus caballus</i>) and chicken (<i>Gallus gallus</i>),</p> <p>using a semi-quantitative method (real-time PCR). The method estimates the proportion of DNA of each species in the total DNA from all the tested species. The method has a</p> <p>detection limit of 0.1% and a quantification limit of 1%. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all</p> <p>tested species and each individual species in bands as follows: Major part (61 - 100%), Medium part (31 - 60%), Minor part (6 - 30%), Diminutive part (1 - 5%), Very diminutive part (&lt;1%).</p> <p>The sample was described as 'Lamb Doner kebab'. DNA of cow and sheep was detected in the sample.</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>I am of the opinion that the meat ingredients used in a meat product described as a 'Lamb Doner Kebab' should be derived from sheep.</p> <p>I am further of the opinion that the sample was not of the nature demanded by the purchaser.</p>
865HQINET0103146	North East Lincolnshire Council	18/01/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	DONER KEBAB	<p>Meat from the sample was analysed for the presence of DNA from cow (<i>Bos taurus</i>), pig (<i>Sus scrofa</i>), sheep (<i>Ovis aries</i>), horse (<i>Equus caballus</i>) and chicken (<i>Gallus gallus</i>), using a semi-quantitative method (real-time PCR). The method estimates the proportion of DNA of each species in the total DNA from all the tested species. The method has a detection limit of 0.1% and a quantification limit of 1%. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows: Major part (61 - 100%), Medium part (31 - 60%), Minor part (6 - 30%), Diminutive part (1 - 5%), Very diminutive part (&lt;1%).</p> <p>The sample was described as 'Doner kebab'. DNA of cow and sheep was detected in the sample.</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>I am of the opinion that, unless the name of the food is otherwise qualified, the only meat ingredients used in a meat product described as a 'kebab' should be derived from sheep.</p> <p>I am further of the opinion that the sample was not of the nature demanded by the purchaser.</p>
23400160039	Northamptonshire County Council	22/06/2017	Retailers	Sections 31 & 43	Sections 31 & 43	LAMB DONER KEBAB	<p>DNA was extracted from the meat from the sample. Nine real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken), <i>Cervus elaphus</i> (Deer), <i>Equus asinus</i> (Donkey) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present.</p> <p>The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:</p>



Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>Chicken (major part)                  Sheep (minor part)                  Beef (very diminutive part)</p> <p>In my opinion, the presence of less than 1% of beef DNA in the sample is unlikely to be due to deliberate substitution.</p> <p>In my opinion, the meat present in a sample described as 'lamb doner kebab' should consist solely of sheep meat. Consequently, I am of the opinion that the sample was not of the substance demanded.</p>
23400160143	Northamptonshire County Council	29/06/2017	Retailers	Sections 31 & 43	Sections 31 & 43	SPAGHETTI BOLOGNES E - BEEF	<p>DNA was extracted from the meat from the sample. Nine real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken), <i>Cervus elaphus</i> (Deer), <i>Equus asinus</i> (Donkey) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present.</p> <p>The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)                  Medium part (30 - 60%)                  Minor part (5 - 30%)                  Diminutive part (1 - 5%)                  Very diminutive part (&lt;1%).</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>The following species were detected in the sample:</p> <p>Beef (major part) Chicken (diminutive part)</p> <p>In my opinion, the meat present in a sample described as 'spaghetti bolognese - beef' should consist solely of beef. Consequently, I am of the opinion that the sample was not of the substance demanded.</p>
87600090784	Portsmouth City Council	18/01/2017	Restaurants and other Caterers	Section 43	N/A	Lamb Doner	<p>The sample was obtained from a catering establishment and was described as 'lamb Doner'. The results show that the sample contains sheep, beef meat and pork meat. The amount of sheep and beef meat equated to greater than 10 per cent of the meat and the quantity of pork meat present was less than 1%. In my opinion the amount of sheep meat and beef meat is consistent with deliberate inclusion whereas the amount of pork is consistent with contamination. In my opinion a lamb doner kebab must only contain sheep meat. I am therefore of the opinion that the sample is not of the nature demanded by a purchaser within the meaning of Section 14 of The Food Safety Act 1990.</p>
87600090781	Portsmouth City Council	18/01/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	Lamb Doner	<p>The sample was obtained from a catering establishment and was described as 'lamb Doner'. The results show that the sample contains sheep, beef meat and pork meat. The amount of sheep and beef equated to greater than 10 per cent of the meat and the quantity of pork meat present was less than 1%. In my opinion the amount of sheep meat and beef meat is consistent with deliberate inclusion whereas the amount of pork is consistent with contamination. In my opinion</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							a lamb doner kebab must only contain sheep meat. I am therefore of the opinion that the sample is not of the nature demanded by a purchaser within the meaning of Section 14 of The Food Safety Act 1990.
567HQ228800 04287	Rhondda Cynon Taf County Borough Council	29/03/2017	Retailers	Penygraig Family Butchers	N/A	STEAK MINCE	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Sheep (diminutive part)          Pork (diminutive part)</p> <p>The sample was described as "Steak Mince", and was therefore not of the substance demanded, contrary to the requirements of Section 14 of the Food Safety Act 1990.</p>
52000570136	Royal Borough of Kensington & Chelsea	17/02/2017	Retailers	Sections 31 & 43	N/A	GOAT MEAT	The sample was analysed for the presence of DNA from beef ( <i>Bos taurus</i> ), pork ( <i>Sus scrofa</i> ), lamb/sheep ( <i>Ovis aries</i> ), goat ( <i>Capra hircus</i> ), horse ( <i>Equus caballus</i> ), chicken ( <i>Gallus gallus</i> ) and turkey ( <i>Meleagris</i>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

						<p>gallopavo), using a semi-quantitative method (real-time PCR). The method estimates the proportion of DNA of each species in the total DNA from all the tested species. The method has a detection limit of 0.1% and a quantification limit of 1%.</p> <p>Of these seven species, the only DNA found was that of sheep, indicating that the sample consisted of sheep meat (<i>Ovis aries</i>) and not goat meat.</p> <p>The sample is therefore not of the nature demanded, contrary to the Food Safety Act 1990.</p>
42300370122	Sandwell Metropolitan Borough Council	27/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	<p>LAMB BURGER</p> <p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present.</p> <p>The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%)</p> <p>The following species were detected in the sample:          Sheep (major part)</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>Chicken (minor part) Beef (very diminutive part)</p> <p>The sample was described as "Lamb Burger". The Products Containing Meat etc. (England) Regulations 2014 prescribe that a lamb burger must contain a minimum of 62% lamb. In my opinion a food described as lamb burger should predominantly contain meat from lamb. The sample contained up to 30% chicken in addition to lamb.</p> <p>I am therefore of the opinion that the name "Lamb Burger" is misleading as to the true nature of the food, which is a lamb and chicken burger.</p>
286HQ271800 03076	Staffordshire County Council	24/01/2017	Retailers	Sections 31 & 43	Sections 31 & 43	SHISH KEBAB	<p>Species determination carried out via DNA extraction followed by RT-PCR gave positive results for sheep (<i>Ovis aries</i>), cow (<i>Bos taurus</i>) and chicken (<i>Gallus gallus</i>) species in this sample; pig (<i>Sus scrofa</i>), goat (<i>Capra hircus</i>) and horse (<i>Equus caballus</i>) species results were negative. Beef DNA was present at a level of less than 0.1%; chicken DNA was present at a level of greater than 1%. The ingredients list supplied on the product label declared mutton as the only meat ingredient. In my opinion, the presence of chicken DNA in a product that declares only mutton as the meat ingredient renders the food not of the substance demanded by the purchaser contrary to the requirements of the Food Safety Act 1990. The sample did not comply with the requirements of The Food Information Regulations 2014 which enact and enforce Regulation (EU) no 1169/2011 on the provision of food information to consumers as the ingredients declaration gave a quantitative (QUID) indication for salt</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							of 6% however, the nutritional information gave a value of 1.8g/100g for salt; one (or both) of these must be incorrect, the information is therefore misleading to consumers. Additionally, the ingredients list was not headed by the word 'Ingredients' as required. Regulation (EC) No 853/2004 laying down specific hygiene rules for foodstuffs requires food business operators to mark a product of animal origin with either a health mark or an identification mark. This sample label displayed no health or identification mark and therefore failed to comply with the aforementioned legislation.
286HQ271800 03178	Staffordshire County Council	20/03/2017	Retailers	Sections 31 & 43	Sections 31 & 43	A MINCED BEEF AND TOMATO SAUCE SERVED WITH COOKED SPAGHETTI	A trace of milk allergen was detected in the food; no detectable amounts of the allergenic ingredients soya, peanut, mustard and sulphites were detected in the product. The presence of celery was declared in the product's ingredients list. The ingredients list declared the presence of beef species only. Species determination carried out via DNA extraction followed by RT-PCR gave positive results for cow (Bos taurus) and pig (Sus scrofa) species in this sample; sheep (Ovis aries), chicken (Gallus gallus), goat (Capra hircus) and horse (Equus caballus) species results were negative. Beef and pork were both main components of the meat within the sample. In my opinion, the presence of pork in a food that only declares beef species renders that food not of the substance demanded by the purchaser contrary to the requirements of the Food Safety Act 1990. The sample did not comply with the requirements of The Food Information Regulations 2014 which enact and enforce Regulation (EU) No 1169/2011 on the provision of food information to consumers for

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							the following reasons: The presence of the allergenic ingredient milk was not indicated on the product label. There were no quantitative indications for the tomato and spaghetti components specified in the name of the food.
89400100019	Thurrock Council	16/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	REGULAR LAMB DONOR	Analysis indicates that the sample contains sheep meat, and in excess of 10% beef meat. The sample was described as 'Regular Lamb Doner'. In my opinion a lamb doner kebab must only contain sheep meat. I am therefore of the opinion that the sample is not of the nature demanded by a purchaser within the meaning of Section 14 of The Food Safety Act 1990. I base my opinion on the Lacors guidance on the composition, description and labelling of doner kebabs published November 2009.
43300820002	Walsall Metropolitan Borough Council	30/01/2017	Retailers	Sections 31 & 43	N/A	GOAT MIX	The sample was analysed for the presence of a range of meat species using DNA techniques, ovine (sheep) species only was detected in the sample. It is my opinion that a food described as 'goat mix' should consist of goat meat only, this sample contained meat of ovine origin only, contrary to the description provided.
43300820005	Walsall Metropolitan Borough Council	30/01/2017	Retailers	Sections 31 & 43	N/A	GOAT MIX	The sample was analysed for the presence of a range of meat species using DNA techniques, ovine (sheep) species only was detected in the sample. It is my opinion that a food described as 'goat mix' should consist of goat meat only, this sample contained meat of ovine origin only, contrary to the description provided.
43300920002	Walsall Metropolitan Borough Council	28/02/2017	Retailers	Sections 31 & 43	N/A	GOAT MEAT	The sample was analysed for a range of meat species using DNA techniques, DNA from ovine (sheep) species only was detected in the sample, contrary to the description provided.

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

43300960101	Walsall Metropolitan Borough Council	22/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	LAMB SHISHLICK	The sample was analysed for a range of meat species using DNA techniques. Ovine and chicken DNA was detected in the sample. The amount of each DNA type was quantified in relation to the amount of total amplified DNA as follows: Ovine DNA = 0.3% of total amplified DNA Chicken DNA = 99.7% of total amplified DNA I am therefore of the opinion that the sample is made from chicken meat (sheep DNA being present only at trace level) contrary to the description 'Lamb shashlick'
43300960047	Walsall Metropolitan Borough Council	21/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	HOT BALL - FINE MINCED LAMB	The meat part of the sample was analysed for a range of meat species using DNA techniques. Ovine and chicken DNA was detected in the sample. The amount of each DNA type was quantified in relation to the amount of total amplified DNA as follows: Ovine DNA = 18.6% of total amplified DNA Chicken DNA = 81.4% of total amplified DNA It is my opinion that a sample described as 'Hot Ball - fine lamb mince' should consist only of lamb meat unless further qualified.
43300930030	Walsall Metropolitan Borough Council	13/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	KEEMA NAN MINCED (MADE WITH LAMB MINCE)	The meat part of the sample was analysed for a range of meat species using DNA techniques. Ovine and chicken DNA was detected in the sample. The amount of each DNA type was quantified in relation to the amount of total amplified DNA as follows: Ovine DNA = 62% of total amplified DNA Chicken DNA = 38% of total amplified DNA It is my opinion that a sample described as 'Keema Nan made with lamb mince' should consist only of lamb meat unless further qualified.
43300960050	Walsall Metropolitan Borough Council	21/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	SHEEK KEBAB - MINCE LAMB	The meat part of the sample was analysed for a range of meat species using DNA techniques. Ovine and chicken DNA was detected in the sample. The amount of each DNA type was quantified in relation to the



Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							amount of total amplified DNA as follows: Ovine DNA = 19.9% of total amplified DNA Chicken DNA = 80.1% of total amplified DNA It is my opinion that a sample described as 'Sheek Kebab - lamb mince' should consist only of lamb meat unless further qualified.
43300900005	Walsall Metropolitan Borough Council	17/02/2017	Retailers	Sections 31 & 43	N/A	GOAT MEAT	The sample was analysed for a range of meat species using DNA techniques, DNA from ovine (sheep) species only was detected in the sample, contrary to the description provided.
43300960098	Walsall Metropolitan Borough Council	22/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	LAMB PARATHA KEBAB - NO PEANUTS	The sample was analysed for the presence of peanut, which was not detected in the sample. The sample was analysed for a range of meat species using DNA techniques. Chicken DNA only was detected in the sample. It is my opinion that a sample described as 'Lamb Paratha Kebab' should consist only of lamb meat unless further qualified. I am therefore of the further opinion, that the sample is not of the nature demanded within the meaning of the Food Safety Act 1990.
43700141255	West Yorkshire Council	31/01/2017	Retailers	Sections 31 & 43	N/A	1x Lamb Quarter pounder	The results above demonstrate that the meat in the sample is beef. No sheep DNA was detected demonstrating an absence of lamb.  In my opinion the meat in a food sold as Lamb Quarter Pounder must consist of lamb and not beef.  I am further of the opinion that the sample was not of the nature demanded within the meaning of Section 14 of the Food Safety Act 1990.

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

43700211445	West Yorkshire Council	19/01/2017	Retailers	Sections 31 & 43	N/A	<p>Lamb mince</p> <p>Meat from the sample was analysed for the presence of DNA from cow (<i>Bos taurus</i>), pig (<i>Sus scrofa</i>), sheep (<i>Ovis aries</i>), horse (<i>Equus caballus</i>) and chicken (<i>Gallus gallus</i>), using a semi-quantitative method (real-time PCR). The method estimates the proportion of DNA of each species in the total DNA from all the tested species. The method has a detection limit of 0.1% and a quantification limit of 1%. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows: Major part (61 - 100%), Medium part (31 - 60%), Minor part (6 - 30%), Diminutive part (1 - 5%), Very diminutive part (&lt;1%).</p> <p>DNA of sheep and chicken was detected in the sample.</p> <p>The results of analysis were consistent with the meat being derived from sheep and chicken.</p> <p>I am of the opinion that a food described as 'Lamb Mince' should be derived only from sheep and that the food was falsely described.</p>
-------------	------------------------	------------	-----------	------------------	-----	--

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

43700250505	West Yorkshire Council	07/04/2017	Retailers	Sections 31 & 43	N/A	Curried Goat	<p>The results above demonstrate that the sample contains meat from sheep and none from goat.</p> <p>In my opinion a food described as Curried Goat must not contain meat from sheep and must contain meat solely from goat.</p> <p>I am further of the opinion that the sample was not of the nature demanded within the meaning of Section 14 of the Food Safety Act 1990.</p>
43700212077	West Yorkshire Council	15/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	Lamb curry	<p>The results above demonstrate that the sample contains meat from cow and none from sheep.</p> <p>In my opinion a food described as Lamb Curry must not contain meat from cow and must contain meat solely from sheep.</p> <p>I am further of the opinion that the sample was not of the nature demanded within the meaning of Section 14 of the Food Safety Act 1990.</p>
43700212695	West Yorkshire Council	12/05/2017	Retailers	Sections 31 & 43	N/A	(lamb/mutton) shish/kebab	<p>In my opinion the meat in a food described as (lamb/mutton) shish/kebab must consist wholly of meat from sheep. The meat in this sample was a mixture of lamb or mutton and beef.</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							I am further of the opinion that the sample was not of the substance demanded within the meaning of Section 14 of the Food Safety Act 1990.
43700141595	West Yorkshire Council	09/03/2017	Retailers	Sections 31 & 43	N/A	Tropican ham & cheese pizza	<p>The cooked cured meat contained no DNA of pig origin. The presence of DNA from turkey indicates that the material is cured poultry product. In my opinion the word ham, when used as part of a food name</p> <p>without qualification, can refer only to cured meat from the hind leg of a pig.</p> <p>I am further of the opinion that the sample was not of the substance demanded within the meaning of Section 14 of the Food Safety Act 1990.</p>
43700250510	West Yorkshire Council	07/04/2017	Retailers	Sections 31 & 43	N/A	Curried Goat	<p>The results above demonstrate that the sample contains meat from sheep and none from goat.</p> <p>In my opinion a food described as Curried Goat must not contain meat from sheep and must contain meat solely from goat.</p> <p>I am further of the opinion that the sample was not of the nature demanded within the meaning of Section 14 of the Food Safety Act 1990.</p>
43700250521	West Yorkshire Council	07/04/2017	Retailers	Sections 31 & 43	N/A	Curried Goat	The results above demonstrate that the sample contains meat from sheep and none from goat.

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>In my opinion a food described as Curried Goat must not contain meat from sheep and must contain meat solely from goat.</p> <p>I am further of the opinion that the sample was not of the nature demanded within the meaning of Section 14 of the Food Safety Act 1990.</p>
43700141550	West Yorkshire Council	03/03/2017	Slaughter houses	Sections 31 & 43	N/A	Ostrich Mince	<p>A minor part of the extracted DNA was from cow demonstrating that the sample contains meat from cow. Separate comparison of the mitochondrial genome with a database including</p> <p>the mitochondrial genome of the Common Ostrich (<i>Struthio camelus</i>) did not produce a match for ostrich.</p> <p>In my opinion a food described as Ostrich Mince must not contain meat from cow.</p> <p>I am further of the opinion that the sample was not of the substance demanded within the meaning of Section 14 of the Food Safety Act 1990.</p>
43700212157	West Yorkshire Council	20/03/2017	Restaurants and other Caterers	Sections 31 & 43	N/A	goat curry	<p>The results above demonstrate that the sample contains meat from sheep and none from goat.</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							<p>In my opinion a food described as Goat Curry must not contain meat from sheep and must contain meat solely from goat.</p> <p>I am further of the opinion that the sample was not of the nature demanded within the meaning of Section 14 of the Food Safety Act 1990.</p>
43700212698	West Yorkshire Council	12/05/2017	Retailers	Sections 31 & 43	N/A	kofta (lamb/mutton )	<p>In my opinion the meat in a food described as Kofta (Lamb/Mutton) must consist wholly of meat from sheep. The meat in this sample was a mixture of lamb or mutton and beef.</p> <p>I am further of the opinion that the sample was not of the substance demanded within the meaning of Section 14 of the Food Safety Act 1990.</p>
43400660040	Wigan Council	04/07/2017	Retailers	Sections 31 & 43	N/A	EXTRA LEAN MINCE BEEF	<p>Approximately 5% of the DNA extracted from the sample was of sheep origin which was indicative of the presence of meat derived from sheep. I am of the opinion that food described as 'extra lean minced beef' should not contain meat derived from sheep and that the food was falsely described. The Food Information Regulations 2014 require that lean minced meat must have:- a fat content of not more than 7%, and a collagen/meat protein ratio of not more than 12%. The fat content and the collagen/meat protein ratio of the sample were satisfactory.</p>
33000071609	Wiltshire County Council	25/08/2017	Retailers	Sections 31 & 43	N/A	BEEFBURGERS	<p>The sample bore the description 'beef burger'. The sample contained beef. Pork was also detected in the sample at a level equivalent to approximately 2% lean pork meat. In my</p>

Annex B IR106 – FOI 2227 Meat samples taken by LAs in 2017

							opinion a product bearing the description 'beef burger' is permitted to contain pork meat however it must also contain at least 62% beef meat. The Food Information Regulations 2014 require prepacked for direct sale meat products to bear an indication as to the quantity of meat used in the preparation of the food. In my opinion the sample consists of beef burgers which have been prepacked for direct sale and I am of the opinion that the quantity of beef used in the preparation of the food must be indicated. The sample labelling bore no such quantity declaration.
57100050542	Wrexham County Council	30/01/2017	Retailers	Sections 31 & 43	N/A	MINCED BEEF	<p>DNA was extracted from the sample. Seven real-time PCR assays for <i>Bos taurus</i> (Beef), <i>Sus scrofa</i> (Pork), <i>Ovis aries</i> (Sheep), <i>Capra hircus</i> (Goat), <i>Equus caballus</i> (Horse), <i>Gallus gallus</i> (Chicken) and <i>Meleagris gallopavo</i> (Turkey) were then applied to detect and measure the amount of those animal species present. The measurement is semi-quantitative, and estimates from the detected signals the amount of DNA present for all tested species and each individual species in bands as follows:</p> <p>Major part (60 - 100%)          Medium part (30 - 60%)          Minor part (5 - 30%)          Diminutive part (1 - 5%)          Very diminutive part (&lt;1%).</p> <p>The following species were detected in the sample:          Beef (major part)          Sheep (minor part)</p> <p>The sample was described as minced beef, and was therefore not of the substance</p>

