



Food and feed law:

Compendium of UK food and feed legislation
with associated context and changes during
April – June 2017

Government Chemist Programme Report



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& Industrial Strategy

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UK food and feed legislation & changes during April – June 2017

Author: Dr Michael Walker

Contact point: Michael Walker
michael.walker@lgcgroup.com
07738 179 985

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Approved by:



Dr Julian Braybrook

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Introduction to 'Food and feed law' review series

This is the first in a series of quarterly reports produced under the Government Chemist Programme 2017–2020. The reports will provide a compendium of UK food and feed law of interest to the Government Chemist, Public Analysts and those working primarily in food and feed standards. The aim is to provide regular updates, to ensure contextual awareness and assist in the interpretation of chemical measurement data. The reports group legislation into six broad categories; although updates in all the categories may not occur for every report. The categories are:

1. **Cross-cutting issues**
2. **Food safety**
 - Including contaminants, food contact materials, and additives.
3. **Consumer choice and prevention of fraud**
 - Including composition and general labelling.
4. **Health and nutrition**
 - Including nutrition labelling, nutrients and supplements.
5. **Regulation**
 - Regulatory activities and overarching provisions.
6. **Feeding stuffs and fertilisers**
 - Animal feed and fertilisers.

In keeping with the changed emphasis that withdrawal from the European Union is likely to bring, the reports now attempt to include developments in Codex (*Codex Alimentarius*) and other major trading blocs such as the US. International and European measures are cited along with the implementing domestic legislation. Potentially temporary and local measures, such as prohibition legislation for shellfish harvesting areas, have not been recorded.

Please note – key information to maintain a permanent introduction to relevant legislation in certain areas is carried forward from previous reports, however legislation in force and made prior to April 2017 may not necessarily be reiterated herein. No responsibility can be taken for the use made of any view, information or advice given. In particular, any view, information or advice given should not be taken as an authoritative statement or interpretation of the law, as this is a matter for the courts.

For any specific legislation this document should be read with the actual measure. Readers must always come to their own view on legislation in force, with expert public analyst and/or legal assistance if appropriate.

The sources of information used have been Office of Public Sector Information ([OPSI](#)), Food Standards Agency ([FSA](#)) updates, European Food Safety Authority ([EFSA](#)) and the European legislative information database, [EUR-Lex](#). Extensive use has been made of the explanatory notes and recitals that accompany legislation. Hyperlinks in the document were accessed and available at the date of this report. The reports are not indexed but the Table of Contents is extensive.

A companion series on standards published by the European standardisation organisation, CEN, some of which are relevant to chemical measurement in support of regulation, is also published on the [Government Chemist website](#).

For successive quarterly reports new entries are identified by a side bar. Redundant material will be progressively removed but may be found in the previous editions.

Summary

This report updates the main text of our legislation review with developments in food and feed law and related scientific and regulatory issues for the period from April to June 2017.

Owing to work on UK withdrawal from the EU and ‘purdah’, the period leading up to an election during which government departments generally refrain from making new announcements, domestic legislative changes were scant.

The two main overarching themes remained exiting the EU and the modernisation of EU food and feed law.

Exiting the EU

The policy paper ‘Legislating for the United Kingdom’s withdrawal from the European Union’ was updated on 15 May 2017 with more detailed text on EU legislation, including treaties, that will be converted into domestic law on the day the UK leaves the EU, subject to the exceptions set out in the paper. There is no explicit reference to food or feed but, for example, legislation may refer to the involvement of an EU institution or be predicated on UK membership of, or access to, an EU regime or system. Once the UK has left the EU, steps must be taken to ensure that the UK statute book continues to function. Moreover, EU Directives require domestic implementation which would expire if the European Communities Act under which much of the conversion has been done, was simply repealed. Thus the ‘Repeal Bill’ will create a power to correct the statute book where necessary over time. Some legislation will necessarily need to await the conclusion of negotiations with the EU which commenced on 19 June 2017. EUR-Lex has established a non-exhaustive list of documents related to the UK’s planned withdrawal from the EU as well as a list of useful links on the subject (see Section 1.1).

Official controls law updated

Modernisation of European food and feed law took a further significant step forward with the replacement of Regulation (EC) No 882/2004 *on official controls* by Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017 *on official controls and other official activities* published in the Official Journal on 7 April 2017. Regulation 2017/625 supplements Regulation (EC) No 178/2002 and, stemming from the Treaty on the Functioning of the European Union, aims for a high level of:

- protection of human, animal and plant health and of the environment via veterinary and phytosanitary measures;
- consumer protection in the internal market; and
- animal welfare along the agri-food chain.

Food and feed must be safe and wholesome and activities which might impact on the safety of the agri-food chain, or on the protection of consumers’ interests in relation to food and food information, must be performed in accordance with specific requirements. The correct application of (European) ‘Union agri-food chain legislation’ must also guard against the possible spread of animal diseases, in some cases transmissible to humans, or of pests injurious to plants or plant products, and ensure the protection of the environment from risks that might arise from genetically modified organisms (GMOs) or plant protection products.

Much of the proposed Regulation will be familiar to those conversant with Regulation 882/2004 but the detection and prevention of potential fraudulent or deceptive practices in the agri-food chain are accorded considerable recognition in the new regulation.

The quality of performance of official controls by Member State authorities is laid out in detail and, in particular, suspicions and detection of non-compliance with agri-food chain legislation must be investigated to determine its origin and extent as well as the operators' responsibilities to remedy the situation and prevent further non-compliance. The organisation and performance of investigations and enforcement actions by the competent authorities should duly take into account potential risks and the likelihood of fraudulent or deceptive practices along the agri-food chain.

Official controls should be thorough and effective but limited, with regard to the burden on food or feed business operators, to that which is necessary for efficiency and effectiveness. Food and feed business operators should have the right, subject to national law, to appeal against the decisions taken by the competent authorities and should be informed of that right. Moreover, those whose animals or goods are subject to sampling, analysis, test or diagnosis have the right to a second expert opinion at their own expense, including documentary review by another expert or, unless technically impossible or irrelevant, a second analysis, test or diagnosis of the parts of the sampling material taken initially.

The new Regulation 2017/625 *on official controls and other official activities* **does not cover**:

- inspection activities in Directive 2009/128/EC¹ on plant protection products;
- Regulation (EU) No 1308/2013² on the common organisation of the markets in agricultural products (arable crops, wine, olive oil, fruit and vegetables, hops, milk and milk products, beef and veal, sheepmeat, goatmeat and honey), *except* where possible cases of fraudulent or deceptive practices are uncovered by controls under Regulation (EU) No 1306/2013³ on the financing, management and monitoring of the common agricultural policy.

Analytical methods are covered in detail, repeat previous requirements for accreditation to EN ISO/IEC 17025 in accordance with Regulation (EC) No 765/2008, and Annex III to the Regulation carries forward previous attributes for the characterisation of methods of analysis.

Internet trading is dealt with: for controls on internet trading or other remote means, competent authorities can obtain samples through anonymously placed orders ('mystery shopping') for testing. All steps should be taken by the competent authorities to preserve the rights of the operators to a second expert opinion.

Member States must devote adequate and stable financial resources to official controls and other official activities which must be in place *alongside* food and feed businesses own checks. However fees for official controls are permitted in certain circumstances and should cover, but not exceed, the costs, including overhead costs, incurred by the competent authorities to perform official controls and be fully transparent.

The roles and responsibilities of European Union reference laboratories and national reference laboratories are carried forward. Rapid Alert Systems are updated to include where potential fraudulent or deceptive practices have or could have a cross-border dimension. Disruptions in a Member State's control systems could trigger Commission action to adopt measures aimed at

¹ Latest consolidated version at time of writing that of 30.06.2014: <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1498148560506&uri=CELEX:02009L0128-20140630>

² Latest consolidated version at time of writing that of 01.01.2014: <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1498148725277&uri=CELEX:02013R1308-20160731>

³ Latest consolidated version at time of writing that of 01.01.2014: <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1498148772975&uri=CELEX:02013R1306-20140101>

containing or eliminating risks arising in the agri-food chain, pending the necessary action to be taken by the Member State concerned to remedy the disruption in the control system.

Infringements of the rules of the Union agri-food chain legislation and of this Regulation must be subject to effective, dissuasive and proportionate penalties at national level. For financial penalties applicable to violations due to fraudulent or deceptive practices to be sufficiently deterrent, they should be set at a level which seeks to exceed the undue advantage for the perpetrator resulting from those practices.

The Regulation aims to ensure that adequate arrangements are in place to enable any person to alert the competent authorities to possible infringements of this Regulation and to protect that person from retaliation.

Further details on Regulation 2017/625 are given in Sections 1.4 and 5 .

Other developments in April – June 2017 included the following.

Case law

Two interesting cases were decided by the (European) Court. Water in poultry featured in a case before the Forth Chamber, with judgement given on 9 March 2017 that upheld the current law and confirmed that frozen or quick-frozen chickens with a water content exceeding the limits are not marketable in the EU and do not satisfy the requirement of sound and fair marketable quality, (see Section 3.2.10). In a case referred from France, the First Chamber gave a ruling on 27 April 2017 that appears to block Member States from setting their own maximum limits for certain nutrients in national legislation on vitamins and minerals in food supplements (see Section 4.4).

Contaminants

Further changes were made to control imports with regard to emerging risks. There were newly increased levels of official controls for ochratoxin A (in dried grapes from Turkey and Iran), for aflatoxins in peppers (*Capsicum* spp.) from Sri Lanka, and in groundnuts (peanuts) and derived products from Senegal, and for salmonella in sesamum seeds from Nigeria and Sudan. The frequency of existing official controls on sulphites in dried apricots from Turkey was increased (see Section 5.8).

Data science

In April 2017 the Food Standards Agency, FSA, published a report on data science from its Chief Scientific Adviser Professor Guy Poppy, his sixth Science Report. Data science is feeding into the implementation of the Agency's innovative new Surveillance Strategy and the 'Regulating our Future' change programme which is redesigning the FSA's regulatory role, (see Section 1.9).

Dioxins and PCBs

Methods of sampling and analysis for the control of levels of dioxins, dioxin-like polychlorinated biphenyls (PCBs) and non-dioxin-like PCBs in certain foodstuffs were updated (see Sections 2.2.3 and 6.1.2).

Food contact materials

Further specific migration limits have been specified, and food simulants for tests to demonstrate compliance with the overall migration limit were updated, (see Section 2.6).

FSA Science Council

The General Advisory Committee on Science (GACS) was replaced by the FSA Science Council chaired by Professor Sandy Thomas. Details of this and other expert committees are in Section 5.3.

Honey

Evidence of the prevalence of honey adulterated with sugars and mislabelled as to their botanical source or geographical origin was released, including findings by liquid chromatography-isotope ratio mass spectrometry. The New Zealand Ministry for Primary Industries published a scientific definition for New Zealand mānuka honey (see Section 3.2.3).

Sugar and obesity

Sugar continues to be a topic of keen current interest. Public Health England, PHE, engaged with all sectors of the food industry, with a positive response, to reduce the amount of sugar in the foods that contribute most to children's intakes by 20% by 2020, with a 5% reduction in the first year. The government announced a proposal to introduce a soft drinks industry levy in April 2018 on soft drinks which contain added sugar, and have a total sugar content above certain thresholds (see Section 4.3).

Transmissible Spongiform Encephalopathies, TSEs

Processed animal protein derived from insects, and compound feed containing such processed animal protein, were authorised for feeding aquaculture animals, and other amendments were made to TSE legislation including as regards the genotyping of ovine animals (see Section 2.11).

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1 Cross-cutting issues

1.1 Exiting and new partnership with the European Union

Background information is at Section 1.1 of our previous report.⁴

On 31 March 2017 the Department for Exiting the European Union issued a White Paper, 'Legislating for the United Kingdom's withdrawal from the European Union'.⁵ This confirms the conversion of existing EU law into domestic legislation and clarifies that any question as to the meaning of EU-derived law will be determined in the UK courts by reference to the Court of Justice of the European Union case law as it exists on the day the UK leaves the EU. Thereafter the extent to which carried over EU law persists in UK legislation will be a matter for Westminster and the devolved countries legislatures.

The policy paper 'Legislating for the United Kingdom's withdrawal from the European Union' was updated on 15 May 2017⁶ with more detailed text on EU legislation, including treaties, that will be converted into domestic law on the day the UK leaves the EU, subject to the exceptions set out in the paper. There is no explicit reference to food or feed but, for example legislation may refer to the involvement of an EU institution or be predicated on UK membership of, or access to, an EU regime or system. Once the UK has left the EU, this legislation will no longer work and steps must be taken to ensure that the domestic statute book continues to function. Moreover, EU Directives require domestic implementation which would fall away if the European Communities Act under which much of the conversion has been done, was simply repealed. Thus the 'Great Repeal Bill' will create a power to correct the statute book where necessary over time. Some legislation will necessarily need to await the conclusion of negotiations with the EU which commenced on 19 June 2017.⁷

EUR-Lex has established a non-exhaustive list of documents related to the UK's planned withdrawal from the EU, documents related to the UK and its position in the EU as well as a list of useful links on the subject.⁸

1.2 Codex Alimentarius

The *Codex Alimentarius*, or 'food code', is the global reference point for consumers, food producers and processors, national food control agencies and the international food trade.⁹ A 2016 publication, 'Understanding Codex'¹⁰ is a valuable guide to its operation. The core function of Codex is the development of international standards.

The following is a summary of recent Codex activity, hyperlinks are embedded in the text owing to the lengthy URLs. Each report includes a summary as well as extensive detail hence only very limited commentary is necessary here.

⁴ <https://www.gov.uk/government/publications/food-and-feed-law-update-january-march-2017>

⁵ <https://www.gov.uk/government/publications/the-great-repeal-bill-white-paper/legislating-for-the-united-kingdoms-withdrawal-from-the-european-union>

⁶ <https://www.gov.uk/government/publications/the-great-repeal-bill-white-paper/legislating-for-the-united-kingdoms-withdrawal-from-the-european-union>

⁷ <https://www.gov.uk/government/organisations/department-for-exiting-the-european-union>

⁸ <http://eur-lex.europa.eu/content/news/Brexit-UK-withdrawal-from-the-eu.html>

⁹ <http://www.fao.org/fao-who-codexalimentarius/codex-home/en/>

¹⁰ <http://www.fao.org/3/a-i5667e.pdf>

[Report](#) of the 9th Session of the FAO/WHO Coordinating Committee for the Near East, FAO Headquarters, Rome, Italy 15–19 May 2017. Regional standards, food fraud, additives, contaminants and administrative matters were discussed.

[Report](#) of the 3rd Session of the Codex Committee on Spices and Culinary Herbs, Chennai, India 6–10 February 2017. Draft standards for cumin, thyme, peppers, and many other herbs and spices were discussed.

[Report](#) of the 25th Session of the Codex Committee on Fats and Oils, Kuala Lumpur, Malaysia 27 February–3 March 2017. Draft standards for various fats and oils were discussed.

[Report](#) of the 49th Session of the Codex Committee on Food Additives, Macao SAR, China 20–24 March 2017. Additives and the commodities in which they are used / permitted were discussed.

[Report](#) of the 11th Session of the Codex Committee on Contaminants in Foods, Rio de Janeiro, Brazil 3–7. April 2017. Lead, arsenic in rice, ergot, prevention and reduction of mycotoxin contamination in spices, 3-MCPD, and other contaminants were discussed.

[Report](#) of the 49th Session of the Codex Committee on Pesticide Residues, Beijing, P.R. China, 24–29 April 2017. MRLs, commodities and evaluations of pesticides were discussed.

[Report](#) of the 23rd Session of the Codex Committee on Food Import and Export Inspection and Certification Systems, Mexico City, Mexico 1–5 May 2017. Draft principles and guidelines for monitoring the performance of national food control systems, electronic certificates, third party assurance schemes in food safety and fair practices in the food trade, food integrity and food authenticity and other issues were discussed.

[Report](#) of the 38th Session of the Codex Committee on Methods of Analysis and Sampling, Budapest, Hungary 8–12 May 2017. The Deputy Government Chemist, Mrs Selvarani Elahi attended. Methods of sampling and analysis of various commodities were discussed.

1.3 FSA Food regulation – ‘Regulating our Future’

The FSA believes achievement of its strategic goal of ‘Food We Can Trust’ will require a fundamental redesign of the FSA’s regulatory role and of the way in which regulation is delivered for the benefit of consumers. FSA is proposing a model that continues to use inspections alongside the information gained from business’s data and accredited third party audits. FSA undertook a three month trial to compare the data held by certain food businesses with the data that local authorities collect from inspections to see if it can be used to provide information as part of setting the standard to create a new, more comprehensive and transparent system of business assurance.¹¹ The study reports¹² showed that industry data could potentially be used by enforcement officers to assess the compliance of food businesses. However, further work is necessary to establish how private sector audit data could be used to provide assurance that businesses are complying with food law. FSA has published information including a series of newsletters on ‘regulating our future’.¹³

¹¹ <https://www.food.gov.uk/news-updates/news/2016/15592/fsa-statement-on-future-food-regulations>

¹² <https://www.food.gov.uk/news-updates/news/2017/16046/regulating-our-future-assurance-studies-published>

¹³ <https://www.food.gov.uk/enforcement/regulation/regulating-our-future>

The FSA Board discussed ‘regulating our future’ at its open meeting on 15 March 2017 with an update from FSA Director Nina Purcell. Commenting during the board debate, FSA Chairman Heather Hancock took the opportunity to rebut any suggestion that the FSA was moving towards a model of self-regulation for UK food businesses. The Board emphasised again that the FSA remained committed to delivering a fundamentally better system that offered agility and confidence as food risks and food businesses changed.¹⁴

See also Section 1.9 on data science.

1.4 Regulation (EC) No 882/2004 on official controls replaced

As recorded in the previous edition of this report,¹⁵ the modernisation of Regulation (EC) No 882/2004 on official controls achieved political consensus and its replacement, Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017 on official controls and other official activities was published in the Official Journal on 7 April 2017.¹⁶ Regulation 2017/625 supplements Regulation (EC) No 178/2002¹⁷ and, stemming from the Treaty on the Functioning of the European Union,¹⁸ aims for a high level of:

- protection of human, animal and plant health and of the environment via veterinary and phytosanitary measures;
- consumer protection in the internal market; and
- animal welfare along the agri-food chain.

Food and feed must be safe and wholesome and activities which might impact on the safety of the agri-food chain, or on the protection of consumers’ interests in relation to food and food information, must be performed in accordance with specific requirements. The correct application of (European) ‘Union agri-food chain legislation’ must also guard against the possible spread of animal diseases, in some cases transmissible to humans, or of pests injurious to plants or plant products, and ensure the protection of the environment from risks that might arise from genetically modified organisms (GMOs) or plant protection products.

The detection and prevention of potential fraudulent or deceptive practices in the agri-food chain are accorded considerable recognition in the new regulation.

1.4.1 Scope of EU food and feed law

The scope of EU food and feed law and its enforcement is summarised in recitals 4–15 of the new regulation which is intended to rationalise and simplify the overall legislative framework and pursue better regulation by integration of the rules applicable to official controls in specific areas. Hence Regulation (EC) No 882/2004 and other Union acts currently governing official controls in specific areas are either repealed or amended by Regulation 2017/625 based on experience gained from their application.

¹⁴ <https://www.food.gov.uk/news-updates/news/2017/16063/summary-of-discussions-at-fsa-board-meeting-15-march-2017>

¹⁵ Walker MJ, 2017, Food and Feed Law: legislation review, January – March 2017, Section 5, pp 45 – 48,

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/617645/Foodfeedlaw_Jan-Mar_2017_v3.pdf

¹⁶ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.095.01.0001.01.ENG&toc=OJ:L:2017:095:TOC

¹⁷ Latest consolidated version at time of writing that of 30.06.2014: <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1498146098818&uri=CELEX:02002R0178-20140630>

¹⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:12012E/TXT>

1.4.2 Quality of performance of official controls by Member State authorities

The performance of official controls by Member State authorities should be in the public interest, appropriately resourced and equipped, impartial and professional. The quality, consistency and effectiveness must be ensured and carried out by independent staff regularly and appropriately trained, including by the Commissions, which may also offer training to third country officials. To promote sharing of experience and best practice the Commission should organise exchange programmes for staff tasked with official controls or other official activities.

Official controls should be performed without prior notice (unless absolutely necessary), regularly, on a risk basis and with appropriate frequency, on all the sectors and in relation to all operators, activities, animals and goods governed by Union agri-food chain legislation, and at all stages of production, processing and distribution. Official controls should be on the basis of written documented procedures with appropriate documented mechanisms to verify continuously that they are effective and consistent, and take corrective action when shortcomings are identified. Controls should be audited in a transparent manner and be subject to independent scrutiny.

There is a presumption of professional confidentiality in undertaking official controls unless there is an overriding interest to justify disclosure, for example to inform the general public where there are reasonable grounds to suspect that a food or feed may present a risk for health. However, confidentiality should not prevent competent authorities from publishing factual information on the outcome of official controls regarding individual operators when the operator concerned has been allowed to comment upon it prior to the disclosure and such comments have been taken into account, or released in parallel. Competent authorities should also, subject to certain conditions, be encouraged and entitled to publish or to make available information about the rating of individual food or feed business operators based on the outcome of official controls. The rating should reflect accurately the actual level of compliance.

Suspicious and detection of non-compliance with agri-food chain legislation must be investigated to determine its origin and extent as well as the operators' responsibilities. Operators must remedy the situation and prevent further non-compliance. The organisation and performance of investigations and enforcement actions by the competent authorities should duly take into account potential risks and the likelihood of fraudulent or deceptive practices along the agri-food chain.

1.4.3 Rights of appeal

Official controls should be thorough and effective but limited, with regard to the burden on food or feed business operators, to that which is necessary for efficiency and effectiveness. Food and feed business operators should have the right, subject to national law, to appeal against the decisions taken by the competent authorities and should be informed of that right. Moreover, those whose animals or goods are subject to sampling, analysis, test or diagnosis have the right to a second expert opinion at their own expense, including documentary review by another expert or, unless technically impossible or irrelevant, a second analysis, test or diagnosis of the parts of the sampling material taken initially.

1.4.4 What the new regulation does not cover

The new Regulation 2017/625 *on official controls and other official activities* **does not cover** verification of compliance with the following aspects of agri-food chain legislation:

- inspection activities in Directive 2009/128/EC¹⁹ on sustainable use of plant protection products;
- Regulation (EU) No 1308/2013²⁰ on the common organisation of the markets in agricultural products (arable crops, wine, olive oil, fruit and vegetables, hops, milk and milk products, beef and veal, sheepmeat, goatmeat and honey), *except* where possible cases of fraudulent or deceptive practices are uncovered by controls under Regulation (EU) No 1306/2013²¹ on the financing, management and monitoring of the common agricultural policy.

1.4.5 New control methods on meat production

For the purpose of developing new control methods on meat production, competent authorities should be allowed to adopt national measures to implement pilot projects that are limited in time and scope.

1.4.6 Analytical methods

Methods used for sampling and for laboratory analyses, tests and diagnoses should meet scientific standards, satisfy the specific analytical, testing and diagnostic need of the laboratory concerned, and offer sound and reliable analytical, test and diagnostic results. Clear rules should be established for the choice of the method to be used where more than one is available from different sources, such as ISO, the European and Mediterranean Plant Protection Organization (EPPO), the International Plant Protection Convention (IPPC), the World Organization for Animal Health (OIE), European Union and national reference laboratories, or national law.

Laboratories that carry out analyses, tests and diagnoses should possess the expertise, equipment, infrastructure and staff to carry out such tasks to the highest standards and, with limited exceptions, be accredited to EN ISO/IEC 17025, in accordance with Regulation (EC) No 765/2008.

Annex III to the Regulation carries forward previous attributes for the characterisation of methods of analysis.

1.4.7 Internet trading

For controls on internet trading or other remote means, competent authorities can obtain samples through anonymously placed orders ('mystery shopping') for testing. All steps should be taken by the competent authorities to preserve the rights of the operators to a second expert opinion.

1.4.8 Controls at EU borders

Specific official controls at Union borders where emerging or known risks so warrant and previously governed by Council Directives 97/78/EC (17), 91/496/EEC (18) and 2000/29/EC and Commission Regulation (EC) No 669/2009 (19) are carried forward. In order to ensure optimal allocation of official control resources assigned to border controls and replace the current

¹⁹ Latest consolidated version at time of writing that of 30.06.2014: <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1498148560506&uri=CELEX:02009L0128-20140630>

²⁰ Latest consolidated version at time of writing that of 01.01.2014: <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1498148725277&uri=CELEX:02013R1308-20160731>

²¹ Latest consolidated version at time of writing that of 01.01.2014: <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=149814872975&uri=CELEX:02013R1306-20140101>

fragmented control frameworks, a common integrated system of official controls at border control posts is to be established. This system will handle all consignments which, given the risk they may carry, should be controlled on their entry into the Union.

1.4.9 Fees for official controls

Member States must devote adequate and stable financial resources to official controls and other official activities which must be in place *alongside* food and feed businesses own checks. Official controls are complex and resource-demanding. To reduce the dependency of the official control system on public finances, competent authorities should collect fees or charges to cover the costs they incur when performing official controls on certain operators, and for certain activities for which Union agri-food chain legislation requires registration or approval in accordance with Union rules on the hygiene of food and feed, or rules governing plant health. Fees or charges should also be collected from operators to compensate the costs of official controls performed in view of issuing an official certificate or attestation, and costs of official controls performed by the competent authorities at border control posts. Fees or charges should cover, but not exceed, the costs, including overhead costs, incurred by the competent authorities to perform official controls and be fully transparent.

1.4.10 European Union- and National- reference laboratories

The roles and responsibilities of European Union reference laboratories and national reference laboratories in providing official laboratories with up-to-date information on available methods, organise or participate actively in inter-laboratory comparative tests and offer training, is carried forward. This includes specific tasks as part of the authorisation procedure for genetically modified food or feed, and feed additives, (in particular as regards methods of detection or analysis proposed by applicants) carried out by the European Union reference laboratories for genetically modified food and feed, and feed additives respectively.

Additional European Union reference centres are envisaged for the authenticity and integrity of the agri-food chain and for animal welfare.

1.4.11 Rapid Alert Systems

The Rapid Alert System for Food and Feed (RASFF), established pursuant to Article 50 of Regulation (EC) No 178/2002, already enables competent authorities to rapidly exchange and disseminate information on serious direct or indirect risks to human health in relation to food or feed, or serious risks to human or animal health or to the environment in relation to feed, for the purpose of enabling rapid measures to be taken to counter those serious risks. This is enhanced – with administrative assistance and cooperation to share information – to detect, investigate and take effective and proportionate action to pursue cross-border violations of Union agri-food chain legislation in cases where potential fraudulent or deceptive practices have or could have a cross-border dimension.

Implementing powers should be conferred on the Commission to adopt implementing acts establishing the specifications of the technical tools to be used, the procedures for communication between liaison bodies and a standard format for requests for assistance, notifications and responses.

1.4.12 National control plans

The requirement for multi-annual national control plans and an annual report to the Commission with information on control activities and the implementation of the control plans continue, with implementing powers conferred on the Commission to adopt implementing acts in respect of establishing standard model forms for annual reports.

1.4.13 Commission controls and audits

Commission experts should be able to perform controls, including audits, in Member States to verify the application of the relevant Union legislation and the functioning of national control systems and competent authorities. Commission controls should also serve to investigate and collect information on enforcement practices or problems, emergencies and new developments in Member States.

1.4.14 Information exchange

Several information systems are established by EU legislation and managed by the Commission, for example the Trade Control and Expert System (Traces system), established by Commission Decisions 2003/24/EC (21) and 2004/292/EC (22) in accordance with Council Directive 90/425/EEC (23) and currently used for the management of data and information on animals and products of animal origin and official controls thereon. This Regulation should allow that system to be maintained and upgraded so as to permit its use for all goods for which Union agri-food chain legislation establishes specific requirements or practical arrangements for official controls. To support a more efficient management of official controls, a computerised information system integrating and upgrading as necessary all relevant existing information systems should be set up by the Commission, allowing for the use of advanced communication and certification tools, and for the most efficient use of the data and information related to official controls.

1.4.15 Disruptions in a Member State's control systems

Disruptions in a Member State's control systems could trigger Commission action to adopt measures aimed at containing or eliminating risks arising in the agri-food chain, pending the necessary action to be taken by the Member State concerned to remedy the disruption in the control system.

1.4.16 Penalties

Infringements of the rules of the Union agri-food chain legislation and of this Regulation should be subject to effective, dissuasive and proportionate penalties at national level throughout the Union, the severity of which takes account, inter alia, of the potential damage to human health that may result from infringements, including in cases where operators fail to cooperate during an official control and in cases where false or misleading official certificates or attestations are produced or used. For financial penalties applicable to violations of the rules perpetrated through fraudulent or deceptive practices to be sufficiently deterrent, they should be set at a level which seeks to exceed the undue advantage for the perpetrator resulting from those practices.

1.4.17 Whistleblowing

The Regulation aims to ensure that adequate arrangements are in place to enable any person to alert the competent authorities to possible infringements of this Regulation and to protect that person from retaliation.

1.4.18 Repeals and amendments

The following are repealed: Regulation (EC) No 882/2004 and Regulation (EC) No 854/2004, Directives 89/608/EEC, 89/662/EEC, 90/425/EEC, 91/496/EEC, 96/23/EC, 96/93/EC and 97/78/EC and Council Decision 92/438/EEC.

The following are amended: Regulation (EC) No 999/2001, Regulation (EC) No 1/2005, Regulation (EC) No 396/2005, Regulation (EC) No 1069/2009, Regulation (EC) No 1099/2009, Regulation (EC) No 1107/2009, Regulation (EU) No 1151/2012, Regulation (EU) No 652/2014 and Directives 98/58/EC, 1999/74/EC, 2007/43/EC, 2008/119/EC and 2008/120/EC.

A Corrigendum to Regulation (EU) 2017/625 was published on 15 March 2017 correcting minor textual errors.²²

1.5 Antimicrobial resistance, AMR

It has been estimated that the global impact of AMR could be 10 million deaths annually by 2050, and cost up to US \$100 trillion in cumulative lost economic output.²³ An FSA commissioned research report confirmed the need for extra surveillance of AMR in food at retail level, to support the wider programme of work currently underway across government to help reduce levels of AMR. The research was released ahead of a *Codex Alimentarius* working group on AMR held in London in late 2016.²⁴ The working group was organised by the FSA and chaired by the UK, USA and Australia. It is the first step in this new area of work, and will set terms of reference for the intergovernmental task force that will follow.²⁵ On 17 February 2017 the Codex Secretariat published²⁶ the report of the working group on AMR mentioned above. The report is available [online](#) as a working document of the 40th Codex Alimentarius Commission which will take place in Geneva in July 2017. The working group, attended by 110 people consisting of: 33 Member Countries, 1 Member Organisation, 13 Observers Organisations, FAO and WHO and the Codex Secretariat, reviewed and revised the following project documents:

- Proposal for new work on the revision of the Code of Practice to Minimise and contain Antimicrobial Resistance (CAC/RCP 61-2005); and
- Proposal for new work on the Guidance on Integrated Surveillance of Antimicrobial Resistance.

Consensus was achieved on the revised project documents (Appendices 1 and 2 in the report), and the revised Terms of Reference for the Provision of Scientific Advice on Antimicrobial Resistance, (Appendix 3 in the report). An electronic working group was deemed an appropriate mechanism for the elaboration of text in each of the two areas of new work. Codex also reported in February 2017 the 10th International Feed Regulators Meeting when feed industry representatives and government officials from 35 countries met to discuss key issues including Feed Safety Risk Management Strategies and the role of animal nutrition and feeding to minimise AMR. The meeting was also informed on the activities of the FAO-led Multi-stakeholder Partnership for Capacity Development for Feed Safety.²⁷ FAO has produced a useful report on the 'drivers, dynamics and epidemiology of antimicrobial resistance in animal production'.²⁸

²² http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.137.01.0040.01.ENG&toc=OJ:L:2017:137:TOC

²³ Prof Guy Poppy, FSA Chief Scientific Adviser's Science Report Issue four: Antimicrobial resistance in the food supply chain https://www.food.gov.uk/sites/default/files/csa-amr-report_0.pdf

²⁴ <http://www.fao.org/fao-who-codexalimentarius/roster/detail/en/c/456452/>

²⁵ <https://www.food.gov.uk/news-updates/news/2016/15746/fsa-publishes-review-of-antimicrobial-resistance-evidence>

²⁶ <http://www.fao.org/fao-who-codexalimentarius/roster/detail/en/c/471647/>

²⁷ <http://www.fao.org/fao-who-codexalimentarius/roster/detail/en/c/470458/>

²⁸ Food and Agriculture Organization. Drivers, dynamics and epidemiology of antimicrobial resistance in animal production - B.A. Wall, <http://www.fao.org/3/a-i6209e.pdf>

1.6 Emerging risks

The Emerging Risks Exchange Network, EREN, has been referred to in previous reports^{29, 30} and regularly updates outline emerging risks in brief meeting reports.³¹

1.7 Food fraud/food crime

Food fraud is a dishonest act or omission in the production or supply of food intended for personal gain or to cause loss to another party. Food fraud becomes food crime when its scale is more complex or likely to be seriously detrimental to consumers, businesses or the overall public interest, or when organised criminals are involved. The criminal activity may be cross-regional, national or international. The concept of 'food crime' was highlighted by the Elliott Review which led to the establishment of the FSA's National Food Crime Unit,³² NFCU. Food Standards Scotland independently established a Scottish Food Crime and Incidents Unit (SFCIU).³³

In 2016 the NFCU launched 'Food Crime Confidential', a reporting facility where anyone with suspicions about food crime can report them safely and in confidence, over the phone and through email. The facility is particularly targeted at those working in or around the UK food industry.³⁴ This followed the 2016 review of the NFCU carried out by FSA under the oversight of an independent steering group, which recommended NFCU should be given additional powers and resources to boost its ability to tackle food crime and protect consumers.³⁵ The NFCU launched an industry guide on 31 October 2016 explaining the NFCU's role and how it can support industry, as the first step in building a meaningful two way dialogue between the NFCU and the food, drink and feed industry.³⁶

Science and technology company Campden BRI has been chosen to provide technical and administrative support to the Food Industry Intelligence Network, FIIN, by curating a database to collect anonymised industry data on food authenticity testing. They will analyse the data producing regular reports for the FIIN members. Campden BRI will also be responsible for managing the FIIN membership and organising FIIN events. FIIN was established by industry technical leaders to share intelligence on food authenticity. FIIN currently has 21 members in the UK including major retailers, manufacturers and food service companies.³⁷

In early 2016 the Food Standards Agency (FSA) published³⁸ the first assessment of food crime in the UK, the Food Crime Annual Strategic Assessment (FCASA). Readers are referred to the FCASA for a list of strategic food crime priorities.

The United Nations Office on Drugs and Crime has published a 'World wildlife crime report 2016: Trafficking in protected species', which includes a case study on caviar in the seafood industry.³⁹ The report as a whole provides good background context for a topic in which molecular biology has a significant role to play.

²⁹ <https://www.gov.uk/government/publications/food-and-feed-law-legislation-review-january-to-march-2016>

³⁰ <https://www.gov.uk/government/publications/food-and-feed-law-update-january-march-2017>

³¹ <https://www.efsa.europa.eu/en/topics/topic/emergingrisks>

³² <https://www.food.gov.uk/enforcement/the-national-food-crime-unit>

³³ <http://www.foodstandards.gov.scot/food-crime>

³⁴ <https://www.food.gov.uk/news-updates/news/2016/15226/food-crime-confidential-launch>

³⁵ <https://www.food.gov.uk/news-updates/news/2016/15679/nfcu-review-published>

³⁶ <https://www.food.gov.uk/news-updates/news/2016/15642/nfcu-launches-industry-guide>

³⁷ <https://www.campdenbri.co.uk/pr/food-fraud.php>

³⁸ <https://www.food.gov.uk/news-updates/news/2016/15017/the-food-standards-agency-fsa-has-today-published-the-first-assessment-of-food-crime-in-the-uk>

³⁹ https://www.unodc.org/documents/data-and-analysis/wildlife/World_Wildlife_Crime_Report_2016_final.pdf

The European Commission IT tool to facilitate the exchange of administrative information between national authorities working to combat cross-border violations in Europe – known as the Administrative Assistance and Cooperation (AAC) system – was described in a previous report. In the wake of the horsemeat episode of 2013, the Commission⁴⁰ also developed an action plan to strengthen controls of the food supply chain. One of these measures was to set up a pan-European mechanism to ensure the rapid exchange of information between national authorities and the Commission in cases of suspected food fraud.⁴¹ The AAC system will ensure that the Food Fraud Network works even more efficiently and is able to respond more swiftly to information requests.

In May 2016 the FDA Food Safety Modernization Act (FSMA) final rule was publicised aimed at preventing intentional adulteration from acts intended to cause wide-scale harm to public health, including acts of terrorism targeting the food supply. Such acts, while not likely to occur, could cause illness, death, economic disruption of the food supply if mitigation strategies are not in place. Rather than targeting specific foods or hazards, this rule requires mitigation (risk-reducing) strategies for processes in certain registered food facilities and a useful set of documents accompanies the fact sheet on this issue.⁴²

A resolution of the European Parliament on food fraud, begun in 2014, has been debated and was published in December 2016. The Parliament noted its concern and has proposed a series of measures.⁴³

See also Section 3.2.3 on honey fraud detection.

1.8 Incidents

In June 2016 the FSA published⁴⁴ its annual report of 2015 food incidents. It showed that in 2015, the FSA and Food Standards Scotland, FSS, were notified of, investigated and managed 1,514 food, feed and environmental contamination incidents in the UK. The four largest contributors in 2015 were: pathogenic micro-organisms, allergens (which increased from 89 to 206), chemical contamination and residues of veterinary medicinal products.

FSA has published a series of within year lists of incidents.⁴⁵ Over the three month period from July – September 2016, FSA issued 54 food notices, of which 30 were allergy alerts, with the top three undeclared allergens being egg, nuts and mustard. The latest available quarterly update is that of 31 January 2017 which covered October – December 2016.⁴⁶ Over the three month period, FSA issued 34 food notices, of which 17 were allergy alerts, with the top three undeclared allergens being milk, nuts and [cereals containing] gluten.

1.9 Data science

International trade in agricultural and food products is more complex than other trade – regulations are stricter, paperwork more cumbersome and logistics more complex – mainly for

⁴⁰ http://ec.europa.eu/food/safety/official_controls/food_fraud/horse_meat/index_en.htm

⁴¹ http://ec.europa.eu/food/safety/official_controls/food_fraud/index_en.htm

⁴² <http://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm378628.htm>

⁴³ Food crisis, fraud in the food chain and the control thereof, European Parliament resolution of 14 January 2014 on the food crisis, fraud in the food chain and the control thereof (2013/2091(INI)) http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2016.482.01.0022.01.ENG&toc=OJ:C:2016:482:TOC

⁴⁴ <http://www.food.gov.uk/news-updates/news/2016/15190/fsa-annual-report-of-incidents-2015-published>

⁴⁵ <https://www.food.gov.uk/news-updates/news/2016/15641/fsa-publishes-list-of-incidents-for-july-to-september-2016>

⁴⁶ <https://www.food.gov.uk/news-updates/news/2017/15935/fsa-publishes-list-of-incidents-for-october-to-december-2016>

safety and authenticity reasons. Detailed information exchange alongside the movement of goods in a supply chain is critically important and progress has been made in electronic, paperless, systems.

In April 2017 FSA published⁴⁷ a report on data science from its Chief Scientific Adviser Professor Guy Poppy, his sixth Science Report. Advances in data science techniques are making the large amounts of data collected by the FSA and food businesses more valuable. The report shows how the Agency is bringing together a wide range of data, from the complex food industry 'ecosystem' to social media and consumer preferences, to explore ways that it can meet its regulatory responsibilities going forward and become data-driven. This also includes working in partnership on research with University College London's Big Data Institute and the Office for National Statistics amongst others, to get the best value from data as well as supporting FSA objectives and learning with and from others. Data Science is feeding into the implementation of the Agency's innovative new Surveillance Strategy and the 'Regulating our Future' change programme which is redesigning the FSA's regulatory role.

A United Nations publication outlines a framework for integrated agri-food information management, taking into account the functional needs of various stakeholders along the supply chain. The benefits as well as challenges involved in developing a comprehensive system are discussed. Some examples of existing paperless systems – which are considered good practices for agri-food trade – are also included together with the list of relevant international standards to be taken into account when implementing the systems. Practical recommendations for, and milestones in the enhancement of agri-food information systems for trade facilitation are provided, including a recommendation to develop a Single Window for Agri-food Trade (SWAT). This publication is aimed mainly at government officials involved in overseeing and making policies related to agri-food trade. It is also relevant to the private sector (both existing and potential traders), associations and any agri-food supply-chain stakeholders interested in making agri-food trade both safer and more efficient. This policy guide builds on the series of technical and legal guides produced by UNNExT to facilitate paperless trade implementation.⁴⁸ Previous guides are also available.⁴⁹

1.10 Global data

Two useful compendia of data were published in late 2016: the World Bank 'Little green data book 2016'⁵⁰ and the United Nations 'World statistics pocketbook 2016'.⁵¹ The former is a ready reference on key environmental data for over 200 economies, organised under the headings of agriculture, forestry, biodiversity, energy, emission and pollution, and water and sanitation. The latter presents one-page profiles of 229 countries or areas of the world. The topics covered include: agriculture, balance of payments, education, energy, environment, food, gender, health, industrial production, information and communication, international finance, international tourism, international trade, labour, migration, national accounts, population and prices.

The European Commission published in December 2016 another edition of the common catalogue of varieties of agricultural plant species in accordance with the provisions of Article 17 of Council Directive 2002/53/EC of 13 June 2002 on the common catalogue of varieties of

⁴⁷ <https://www.food.gov.uk/news-updates/news/2017/16129/science-report-published-on-use-of-data-science-in-the-fsa>

⁴⁸ Information management in agrifood chains: towards an integrated paperless framework for agrifood trade facilitation
<http://unnnext.unescap.org/pub/agriguide15.pdf>

⁴⁹ <http://unnnext.unescap.org>

⁵⁰ <http://data.worldbank.org/products/data-books/little-green-data-book>

⁵¹ <http://unstats.un.org/unsd/publications/pocketbook>

agricultural plant species. This 35th edition, which runs to over 800 pages, lists all the varieties, the seeds of which, pursuant to Article 16 of the Directive, are not subject to marketing restrictions relating to variety, except in the cases provided for in Article 16(2) and Article 18 of the Directive.⁵²

1.11 Machinery of Government

An Order in Council⁵³ was made under sections 1 and 2 of the Ministers of the Crown Act 1975 to make provisions in connection with the establishment of the Department for Business, Energy and Industrial Strategy, the Department for Exiting the European Union, (and other departments).

2 Food safety

2.1 Food hypersensitivity – (Food Allergy & Food Intolerance)

Background to this topic is to be found in papers published or contributed to from the Government Chemist capability building research on food allergen measurement.⁵⁴⁻⁵⁷ Significant developments over recent years include a conviction and custodial sentence for negligence manslaughter following the death of a peanut allergic customer who had a reaction to a curry.⁵⁸ Following the cumin and mahaleb cases, guidance launched on 7 June 2016 provides food companies that use culinary dried herbs and spices with information on best practice in assessing and protecting the authenticity of these products. The guidance was developed by the British Retail Consortium (BRC), Food and Drink Federation (FDF) and Seasoning and Spice Association (SSA) in liaison with the FSA and FSS.^{59, 60}

Changes to European legislation took effect in mid-2016 which affect gluten-free labelling. Regulation (EC) No 41/2009 provided a legal framework around the term gluten-free and was repealed on 20 July 2016. From this date, rules relating to gluten are provided by Regulation (EU) No 1169/2011 on the provision of food information to consumers (FIC), and Commission Implementing Regulation (EU) No 828/2014,⁶¹ national provisions will allow enforcement at UK level.⁶²

Regulation (EU) No 828/2014 stipulates that the statement “*gluten-free*” may only be made where the food as sold to the final consumer contains no more than 20 mg kg⁻¹ of gluten. The statement “*very low gluten*” may only be made where the food, consisting of or containing one or more ingredients made from wheat, rye, barley, oats or their crossbred varieties which have been specially processed to reduce the gluten content, contains no more than 100 mg kg⁻¹ of gluten in

⁵² [Common catalogue of varieties of agricultural plant species — 35th complete edition](#)

⁵³ The Secretaries of State for Business, Energy and Industrial Strategy, for International Trade and for Exiting the European Union and the Transfer of Functions (Education and Skills) Order 2016 No. 992, http://www.legislation.gov.uk/uksi/2016/992/pdfs/ukxi_20160992_en.pdf

⁵⁴ Johnson *et al.* (2014) A multi-laboratory evaluation of a clinically-validated incurred quality control material for analysis of allergens in food, *Food Chem.*, 148: 30-36

⁵⁵ Gowland, M. H. and Walker, M. J. (2015) Food allergy, a summary of eight cases in the UK criminal and civil courts: effective last resort for vulnerable consumers?. *J. Sci. Food Agric.*, 95: 1979–1990

⁵⁶ Holcombe *et al.* (2015) A peanut quality control material to improve allergen analysis – How difficult can it be?, *Clin. Transl. Allergy*, 5(Suppl 3): P116

⁵⁷ Walker *et al.* (2016) Flawed food allergen analysis—health and supply chain risks and a proposed framework to address urgent analytical needs, *Analyst*, 141: 24-35

⁵⁸ <http://www.bbc.co.uk/news/uk-england-36360111>

⁵⁹ <https://www.fdf.org.uk/news.aspx?article=7539>

⁶⁰ <https://www.fdf.org.uk/herbs-spices-guidance.aspx>

⁶¹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1471529878473&uri=CELEX:32014R0828>

⁶² <https://www.coeliac.org.uk/about-us/news/changes-to-european-legislation-on-gluten-free-labelling/>

the food as sold to the final consumer. Additionally, oats contained in a food presented as gluten-free or very low gluten must have been specially produced, prepared and/or processed in a way to avoid contamination by wheat, rye, barley, or their crossbred varieties and the gluten content of such oats cannot exceed 20 mg kg⁻¹.

National provisions were made by the Food Information (Scotland) Amendment Regulations 2016, 191,⁶³ which came into force on 20 July 2016. These affect SSI 2014/312 which is amended, and SSI 2010/355 which is revoked. These Regulations make provision to enforce in Scotland the requirements of Commission Implementing Regulation (EU) No 828/2014 on the requirements for the provision of information to consumers on the absence or reduced presence of gluten in food ("Regulation 828/2014"). Regulation 2 makes amendments to the Food Information (Scotland) Regulations 2014 to ensure that Articles 3(1) and 4 of Regulation 828/2014 can be enforced. In particular, they have the effect of making it an offence to fail to comply with those Articles and they ensure that powers of entry are available under section 32 of the Food Safety Act 1990 for the purposes of enforcing those Articles. Regulation 3 revokes the Foodstuffs Suitable for People Intolerant to Gluten (Scotland) Regulations 2010.

Commission Implementing Regulation (EU) No 828/2014 was also implemented:

- In Northern Ireland by the Food Information (Amendment) Regulations (Northern Ireland) 2016.⁶⁴ The Foodstuffs Suitable for People Intolerant to Gluten Regulations (Northern Ireland) 2010 were revoked (note the explanatory note to the 2016 regulations incorrectly cites the latter as 2016 rather than 2010);
- In Wales by the Food Information (Wales) (Amendment) Regulations 2016⁶⁵ which revoke the Foodstuffs Suitable for People Intolerant to Gluten (Wales) Regulations 2010.

The fifth FSA Chief Scientific Adviser's report by Professor Guy Poppy focused on food allergy and intolerance, explaining in a readable way the complex and evolving science behind these conditions. The report was launched on 4 November 2016 at a Food Allergy and Food Intolerance Research Programme workshop in London.⁶⁶

The Food Standards Agency publishes regular reports of surveys into information about the public's self-reported behaviours, attitudes and knowledge relating to food issues. The latest such report, published on 30 March 2017,⁶⁷ (see section 3.6) reported on food allergy and intolerance. Of those who reported an adverse reaction or avoided certain foods, the most common foods that people reported having an adverse reaction to were cows' milk and cows' milk products (22%), cereals containing gluten (13%) and molluscs, e.g. mussels, oysters (11%).

2.2 Contaminants

Regulation (EC) No 1881/2006 remains the primary European legislation, the latest consolidated version of which was published in April 2016.⁶⁸ Domestic implementation is via a set of 'Contaminants in Food' regulations made in each country of the UK in 2013, for example the Contaminants in Food (England) Regulations 2013.⁶⁹ A search of <http://www.legislation.gov.uk/> on the search term 'contaminants' will list the current statutory instruments, their amendments

⁶³ <http://www.legislation.gov.uk/ssi/2016/191/contents/made>

⁶⁴ <https://www.food.gov.uk/sites/default/files/food-information-regulations-ni-2016.pdf>

⁶⁵ <http://www.legislation.gov.uk/wsi/2016/664/made>

⁶⁶ <https://www.food.gov.uk/news-updates/news/2016/15656/fifth-csa-report-launched>

⁶⁷ <https://www.food.gov.uk/news-updates/news/2017/16111/latest-food-and-you-survey-report-published>

⁶⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1466704439817&uri=CELEX:02006R1881-20160401>

⁶⁹ <http://www.legislation.gov.uk/uksi/2013/2196/contents/made>

and predecessors. A useful summary of contaminant information is available on the European Commission website.⁷⁰ Please see below for further details on individual contaminants.

2.2.1 Sampling and analysis for contaminants

Commission Regulation (EC) No 333/2007 lays down the methods of sampling and analysis for the official control of levels of certain contaminants in foodstuffs. This was amended by Commission Regulation (EU) 2016/582 of 15 April 2016 as regards the analysis of inorganic arsenic, lead and polycyclic aromatic hydrocarbons and certain performance criteria for analysis. As recorded previously, Regulation (EC) No 1881/2006 was amended by Commission Regulation (EU) 2015/1006 to set maximum levels for inorganic arsenic. In light of this, specific procedures for analysis for inorganic arsenic are required. EN standard 13804 on the determination of elements and their chemical species has been updated. The maximum levels for polycyclic aromatic hydrocarbons (PAH) in cocoa beans and derived products are on a fat basis. Proficiency tests performed by the European Union Reference Laboratory for PAH indicate divergences in the determination of the fat content. It is therefore appropriate to harmonise the approach for the determination of the fat content. These changes are set out in Regulation (EU) 2016/582.⁷¹

Polychlorinated biphenyls, PCBs, are mentioned in Council Directive 96/23/EC 29 April 1996 on measures to monitor certain substances and residues thereof in live animals and animal products, the annexes of which deal with official sampling. The latest consolidated version is that of 1 July 2013.⁷²

2.2.2 Mycotoxins

Previous quarterly reports should be consulted for information, e.g. on ergot, erucic acid and tropane alkaloids, and the impact of mycotoxins in developing countries.

In December 2016 an error was corrected in Commission Regulation (EC) No 401/2006 of 23 February 2006 laying down the methods of sampling and analysis for the official control of the levels of mycotoxins in foodstuffs. The error regarding units seems to have been introduced by Regulation (EU) No 519/2014 of 16 May 2014 in the table in Annex II that prescribed performance criteria for methods for the determination of aflatoxins. Concentrations were stated in mg kg⁻¹ and while it was no doubt generally recognised by practicing analysts that the units should be µg kg⁻¹ in keeping with the limits, a Corrigendum was issued to make this clear.⁷³

2.2.3 Dioxins and related compounds

Regulation 1881/2006 establishes, with certain derogations, maximum levels for non-dioxin-like polychlorinated biphenyls (PCBs) dioxins and furans and for the sum of dioxins, furans and dioxin-like PCBs in certain foodstuffs. Please refer to previous editions of this review for further details.⁷⁴

⁷⁰ http://ec.europa.eu/food/safety/chemical_safety/contaminants/index_en.htm

⁷¹ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.101.01.0003.01.ENG&toc=OJ:L:2016:101:TOC&mc_cid=e1843f434a&mc_eid=f1b5809dbc

⁷² <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1498122962393&uri=CELEX:01996L0023-20130701>

⁷³ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.337.01.0024.01.ENG&toc=OJ:L:2016:337:TOC

⁷⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/576807/Foodfeedlaw_July-Sept_16_Final.pdf

Commission Recommendation 2013/711/EU⁷⁵ sets out action levels for polychlorinated dibenzo-para-dioxins and polychlorinated dibenzofurans (PCDD/Fs) and dioxin-like PCBs in food. The action levels are a tool to be used by competent authorities and food business operators to highlight those cases where it is appropriate to identify a source of contamination and to take the necessary measures in order to reduce or eliminate it.

Commission Regulation (EU) 2017/644 of 5 April 2017⁷⁶ laid down methods of sampling and analysis for the control of levels of dioxins, dioxin-like PCBs and non-dioxin-like PCBs in certain foodstuffs and repealed Regulation (EU) No 589/2014. The rationale for additional control of sampling and analysis included ensuring that food business operators applying the controls performed within the framework of Article 4 of Regulation (EC) No 852/2004 (see Section 2.14) apply representative sampling procedures and appropriate laboratory performance criteria. Interestingly, the European Union Reference Laboratory for Dioxins and PCBs has found that analytical results in certain cases are not reliable when appropriate laboratory performance criteria are not applied by laboratories performing the analysis of samples taken by food business operators. Regulation 2017/644 also deletes the use of a decision limit as provided for in Commission Decision 2002/657/EC for the analysis of dioxins and PCBs in food, in favour of an expanded uncertainty using a coverage factor of 2, giving a level confidence of approximately 95 %. The regulation also provides for reporting requirements for physico-chemical methods used for screening in line with the reporting requirements for bioanalytical screening methods and makes other minor amendments.

2.3 Non regulated contaminants

There are some contaminants for which legislation is not currently appropriate. Some compounds arise as artefacts of food processing or cooking, examples include:

- Acrylamide
- Apricot kernels – cyanide
- Glycerol based process contaminants (MCPD and GE)
- Endocrine disruptors
- Nickel

Updates on the above are in previous editions of this review⁷⁷ and further information is recorded below as it arises.

2.3.1 Acrylamide

In 2002 it was discovered that acrylamide, a potential carcinogen, can be formed in food by the reaction of the amino acid asparagine with reducing sugars (particularly glucose and fructose) as part of the Maillard Reaction (a complex series of reactions between amino acids and reducing sugars, usually at increased temperatures). Since then, major international efforts have been mounted to investigate the principal sources of dietary exposure, to assess the associated health risks and develop risk management strategies. In February 2017 FSA carried out an awareness campaign (Go for Gold)⁷⁸ to help people understand how to minimise exposure to acrylamide when cooking at home.

⁷⁵ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1498122697939&uri=CELEX:32013H0711>

⁷⁶ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.092.01.0009.01.ENG&toc=OJ:L:2017:092:TOC

⁷⁷ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/576807/Foodfeedlaw_July-Sept_16_Final.pdf

⁷⁸ <https://www.food.gov.uk/news-updates/news/2017/15890/reduce-acrylamide-consumption>

2.4 Food additives

Annex II to Regulation (EC) No 1333/2008 lays down a European Union list of food additives approved for use in foods and their conditions of use, and Annex I to Regulation (EC) No 1334/2008 lays down a European Union list of flavourings and source materials approved for use in and on foods and their conditions of use. Commission non-official guidance describes the food categories in Part E of Annex II to Regulation 1333/2008.⁷⁹

Regulation (EC) No 1333/2008 is enforced in the UK by the Food Additives, Flavourings, Enzymes and Extraction Solvents (name of UK country) Regulations 2013 in each country of the UK.⁸⁰⁻⁸³

A database of additives is available on the European Commission website,⁸⁴ and entries on specific additives will be retained until captured by the database unless the category is of general interest. Food Additives Legislation Guidance to Compliance (October 2015) is available from FSA.⁸⁵

Regulation (EU) No 231/2012⁸⁶ sets specifications for food additives listed in Annexes II and III to Regulation (EC) No 1333/2008. A compendium of food additive specifications is available online.⁸⁷

The 83rd report of the Joint FAO/WHO Expert Committee on Food Additives was published in June 2017. It includes evaluations of technical, toxicological and/or dietary exposure data for six contaminants or groups of contaminants (aflatoxins, 4,15-diacetoxyscirpenol, (DAS), fumonisins, glycidyl esters, 3-MCPD esters and 3-MCPD, sterigmatocystin) as well as an evaluation of co-exposure of fumonisins with aflatoxins.⁸⁸

2.4.1 Casein and caseinates

The status of food additives in caseinates was clarified by aligning Annex II with the provisions of Directive (EU) 2015/2203⁸⁹ on caseins and caseinates intended for human consumption. A food category “edible caseinates” was established and the additives authorised in edible caseinates included with the respective conditions of use by Commission Regulation (EU) 2016/691 of 4 May 2016.⁹⁰ Compositional standards for caseinates are given in the Directive, see section 3.2.1.

2.4.2 Nitrites

Commission Regulation (EU) 2017/839 of 17 May 2017 amended Annex II to Regulation 1333/2008 to permit the use of nitrites (E 249-250) in ‘golonka peklowana’ a traditional Polish meat preparation.⁹¹

⁷⁹ http://ec.europa.eu/food/food/FAEF/additives/guidance_en.print.htm

⁸⁰ <http://www.legislation.gov.uk/uksi/2013/2210/contents/made>

⁸¹ <http://www.legislation.gov.uk/wsi/2013/2591/contents/made>

⁸² <http://www.legislation.gov.uk/ssi/2013/266/contents/made>

⁸³ <http://www.legislation.gov.uk/nisr/2013/220/contents/made>

⁸⁴ http://ec.europa.eu/food/safety/food_improvement_agents/additives/database_en

⁸⁵ <https://www.food.gov.uk/sites/default/files/multimedia/pdfs/guidance/food-additives-legislation-guidance-to-compliance.pdf>

⁸⁶ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1499108628009&uri=CELEX:02012R0231-20170317>

⁸⁷ <http://www.fao.org/3/a-i6413e.pdf>

⁸⁸ <http://www.who.int/foodsafety/publications/technical-report-series-1002/en/>

⁸⁹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1466676596182&uri=CELEX:32015L2203>

⁹⁰ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.120.01.0004.01.ENG&toc=OJ:L:2016:120:TOC

⁹¹ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.125.01.0007.01.ENG&toc=OJ:L:2017:125:TOC

2.4.3 Phosphates

Commission Regulation (EU) 2017/871 of 22 May 2017 amended Annex II to Regulation 1333/2008 as regards the use of phosphoric acid, phosphates (di, tri and polyphosphates (E 338-452) in certain Czech meat preparations.⁹²

2.4.4 Propellants in colour preparations

Commission Regulation (EU) 2017/874 of 22 May 2017 amended Annex III to Regulation 1333/2008 to permit the use of butane (E 943a), isobutane (E 943b) and propane (E 944) in sprays in order to obtain an appropriate homogenous coverage of colours on foods.⁹³

2.4.5 Sulphites

In April 2014 EFSA published a major review of the widely used additives sulphur dioxide and the sulphites group, which are included as a legislated allergen group in the Food Information Regulation 1169/2011 owing to possible intolerance reactions and recorded probable fatalities in consumers sensitive to sulphites in food. EFSA also noted that endogenous sulphites can be generated as a consequence of the body's normal processing of sulphur-containing amino acids and that sulphites may occur as a consequence of fermentation and are naturally present in a number of foods and beverages. EFSA confirmed that although the toxicological database was limited, the current group ADI of 0.7 mg SO₂ equivalent/kg bw per day (derived using a default uncertainty factor of 100) would remain adequate but should be considered temporary whilst the database was improved. The EFSA Panel further concluded that exposure estimates to sulphur dioxide–sulphites were higher than the group ADI for all population groups.⁹⁴

2.4.6 Additives in wine

Wine making is controlled by Commission Regulation (EC) No 606/2009 which lays down authorised oenological practices (Annex I A). The International Organisation of Vine and Wine (OIV) discuss and adopt oenological practices which may be subsequently incorporated in EU law. For examples please see the previous edition of this report.⁹⁵

2.4.7 Flavourings

Flavourings and certain food ingredients with flavouring properties are controlled by Regulation (EC) No 1334/2008 of the European Parliament and of the Council of 16 December 2008.⁹⁶ The regulation is regularly updated, readers should refer to Eur Lex for the latest version as only major updates are recorded here.

⁹² http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.134.01.0003.01.ENG&toc=OJ:L:2017:134:TOC

⁹³ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.134.01.0018.01.ENG&toc=OJ:L:2017:134:TOC

⁹⁴ http://www.efsa.europa.eu/sites/default/files/scientific_output/files/main_documents/4438.pdf

⁹⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/576807/Foodfeedlaw_July-Sept_16_Final.pdf

⁹⁶ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1445980490072&uri=CELEX:02008R1334-20150729>

2.5 Extraction solvents

Directive 2009/32/EC applies to extraction solvents used or intended for use in the production of foodstuffs or food ingredients, other than extraction solvents used in the production of food additives, vitamins and other nutritional additives, unless listed in its Annex I.

2.6 Food contact materials

Regulation (EC) No 1935/2004⁹⁷ of the European Parliament and of the Council of 27 October 2004 provides the framework law on materials and articles intended to come into contact with food, implemented in England by the Materials and Articles in Contact with Food (England) Regulations 2012 with equivalents in Scotland, Wales and Northern Ireland. The national regulations implement the requirements of EU Directives (which are not directly applicable) relating to ceramic articles (84/500/EC) and regenerated cellulose film (2007/42/EC). They additionally maintain the controls on vinyl chloride polymer/co-polymer in Directive 78/142/EEC that are not covered under the Food Contact Plastics Regulation.⁹⁸

More detailed provisions are as follows:

- Regulation 2023/2006 on Good Manufacturing Practice
- Regulation 450/2009 on 'Active and Intelligent' Materials and Articles
- Regulation 10/2011 (The 'Food Contact Plastics' Regulation)
- Regulation 1895/2005 on the use of certain epoxy derivatives

The above legislation is best accessed via EUR-Lex although useful advice and links are available on the Commission websites, including a link to database on Food Contact Materials.^{99, 100}

In August 2016 Regulation 10/2009 was extensively amended by Commission Regulation (EU) 2016/1416.¹⁰¹ Recent EFSA opinions have been incorporated and textual errors corrected, the definition 'hot-fill' has been clarified, and other technical clarifications made.

Commission Regulation 2015/1906¹⁰² has amended Regulation (EC) No 282/2008 on recycled plastic materials and articles intended to come into contact with foods. The amendment clarifies regulatory procedures consequent upon Decision 1999/468/EC having been replaced by Regulation (EU) No 182/2011.

Commission Regulation (EU) 2017/752 of 28 April 2017¹⁰³ amended and corrected Regulation (EU) No 10/2011 to include recent EFSA opinions and correct textual errors. The authorisation of several substances in Table 1 of Annex I to the Regulation refers to note (1) in Table 3 of that Annex. Compliance is verified by residual content per food contact surface area pending the availability of an analytical method for determining the specific migration. As adequate migration testing methods are available the specific migration limits have now been specified. In addition in Annex III Table 3, "Food simulants for tests to demonstrate compliance with the overall migration limit", has been updated. In Annex IV, point 8(iii) is replaced by '(iii) the highest food contact

⁹⁷ See EUR-Lex for up to date versions of legislation: <http://eur-lex.europa.eu/homepage.html>

⁹⁸ See the FSA website for general comments and links to national legislation across the UK: <http://www.food.gov.uk/business-industry/manufacturers/contaminants-fcm-guidance/about-the-regulations>

⁹⁹ http://ec.europa.eu/food/safety/chemical_safety/food_contact_materials/legislation/index_en.htm

¹⁰⁰ http://ec.europa.eu/food/safety/chemical_safety/food_contact_materials/index_en.htm

¹⁰¹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1474057348374&uri=CELEX:32016R1416>

¹⁰² http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2015.278.01.0011.01.ENG

¹⁰³ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.113.01.0018.01.ENG&toc=OJ:L:2017:113:TOC

surface area to volume ratio for which compliance has been verified in accordance with Article 17 and 18 or equivalent information’.

2.6.1 Mineral oil hydrocarbons (MOH)

Mineral oil hydrocarbons (MOH) are derived mainly from crude oil, but also produced synthetically from coal, natural gas and biomass. MOH can be present in food through environmental contamination, lubricants for machinery used during harvesting and food production, processing aids, food additives and food contact materials. Food grade MOH products are treated to minimise the mineral oil aromatic hydrocarbons (MOAH) content. In 2012 the Scientific Panel on Contaminants in the Food Chain (CONTAM Panel) of EFSA concluded (1) that the potential human health impact of groups of substances among the MOH vary widely. MOAH may act as genotoxic carcinogens, while some mineral oil saturated hydrocarbons (MOSH) can accumulate in human tissue and may cause adverse effects in the liver. As some MOAH are considered mutagenic and carcinogenic, it is important to organise monitoring of MOH better to understand the relative presence of MOSH and MOAH in food commodities that are major contributors to dietary exposure. Migration from food contact materials such as paper and board packaging is suspected to contribute significantly to the total exposure, hence monitoring should include pre-packaged food, the packaging material and the presence of functional barriers, and equipment used for storage and processing. Certain parameters may increase the migration of MOH from packaging into food, such as storage time and storage conditions. As MOH are easier to detect in high quantities, the sampling strategy should take account of such parameters when their migration is highest. Commission Recommendation (EU) 2017/84 of 16 January 2017¹⁰⁴ advised on the monitoring of mineral oil hydrocarbons in food and in materials and articles intended to come into contact with food. Member States should, with the active involvement of food business operators as well as manufacturers, processors and distributors of food contact materials and other interested parties, monitor the presence of MOH in food during 2017 and 2018. The monitoring should cover animal fat, bread and rolls, fine bakery ware, breakfast cereals, confectionery (including chocolate) and cocoa, fish meat, fish products (canned fish), grains for human consumption, ices and desserts, oilseeds, pasta, products derived from cereals, pulses, sausages, tree nuts, vegetable oils, as well as food contact materials used for those products. Sampling should be in accordance with the provisions laid down in Commission Regulation (EC) No 333/2007. The European Union Reference Laboratory (EU-RL) for Food Contact Materials is mandated to develop guidance on methods of sampling and analysis

2.7 Marine biotoxins

The overarching law governing is given in the consultation as Regulation (EC) No 853/2004¹⁰⁵ laying down specific hygiene rules for food of animal origin, which *inter alia* defines ‘marine biotoxins’ as poisonous substances accumulated by bivalve molluscs, in particular as a result of feeding on plankton containing toxins. Limits are prescribed measured in the whole body or any part edible separately):

- (a) for paralytic shellfish poison (PSP), 800 micrograms per kilogram;
- (b) for amnesic shellfish poison (ASP), 20 milligrams of domoic acid per kilogram;
- (c) for okadaic acid, dinophysistoxins and pectenotoxins together, 160 micrograms of okadaic acid equivalents per kilogram;
- (d) for yessotoxins, 3.75 milligrams of yessotoxin equivalent per kilogram; and
- (e) for azaspiracids, 160 micrograms of azaspiracid equivalents per kilogram.

¹⁰⁴ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.012.01.0095.01.ENG&toc=OJ:L:2017:012:TOC

¹⁰⁵ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1494593945343&uri=CELEX:02004R0853-20160401>

Regulation 853/2004 is given effect in Scotland by the Food Hygiene (Scotland) Regulations 2006¹⁰⁶ last amended in 2016. In England the Food Safety and Hygiene (England) Regulations 2013 apply.¹⁰⁷ Recognised testing methods for marine biotoxins are described in Annex III of Commission Regulation (EC) No 2074/2005 of 5 December 2005.¹⁰⁸ Further information is available from FSA¹⁰⁹ on shellfish monitoring and fish and shellfish¹¹⁰ and from Food Standards Scotland.¹¹¹ EFSA have published a number of opinions on marine biotoxins and further information is also available from the Centre for Environment, Fisheries and Aquaculture Science (Cefas)¹¹² and the Agri-Food & Biosciences Institute (AFBI).¹¹³

2.8 Pesticides

Guidance on maximum residue levels (MRLs) for pesticides and analytical methods is given on the Commission website.¹¹⁴ Commission Implementing Regulation (EU) 2017/660 of 6 April 2017 extended previous coordinated multiannual control programme to ensure compliance with MRLs and to assess the consumer exposure to pesticide residues in and on food of plant and animal origin to 2018, 2019 and 2020 with amended provisions.¹¹⁵

Regulation (EC) No 396/2005 governs MRLs of pesticides in or on food and feed of plant and animal origin; Annexes II, III and V to the regulation are regularly amended as regards MRLs and can be seen on the EU Pesticides Database.^{116, 117}

Individual records of MRLs and changes thereto are not reproduced here.

Rules for the authorisation of pesticides (plant protection products) in commercial form and for their placing on the market, use and control within the European Union are contained in Regulation (EC) No 1107/2009 of the European Parliament and of the Council.¹¹⁸ Regulation 1107/2009 is implemented by Commission Implementing Regulation (EU) No 540/2011 of 25 May 2011¹¹⁹ which is frequently updated.

2.8.1 Biocidal Products

The Biocidal Product Regulation (Regulation (EU) 528/2012) concerns the placing on the market and use of biocidal products, which are used to protect humans, animals, materials or articles against harmful organisms, like pests or bacteria, by the action of the active substances contained in the biocidal product. The regulation is frequently updated. Further information is available on the website of the European Chemicals Agency.¹²⁰

¹⁰⁶ <http://www.legislation.gov.uk/ssi/2006/3/regulation/13/made>

¹⁰⁷ <http://www.legislation.gov.uk/ukxi/2013/2996/contents/made>

¹⁰⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1494594527755&uri=CELEX:02005R2074-20160603>

¹⁰⁹ <https://www.food.gov.uk/enforcement/monitoring/shellfish/>

¹¹⁰ <https://www.food.gov.uk/business-industry/fish-shellfish>

¹¹¹ <http://www.foodstandards.gov.scot/food-safety-standards/advice-business-and-industry/shellfish>

¹¹² <https://www.cefas.co.uk/>

¹¹³ <https://www.afbini.gov.uk/articles/marine-biotoxins-shellfish>

¹¹⁴ http://ec.europa.eu/food/plant/pesticides/max_residue_levels/guidelines_en

¹¹⁵ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.094.01.0012.01.ENG&toc=OJ:L:2017:094:TOC

¹¹⁶ <http://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=homepage&language=EN>

¹¹⁷ http://ec.europa.eu/food/plant/pesticides/max_residue_levels/index_en.htm

¹¹⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1474202948544&uri=CELEX:02009R1107-20140630> (but see EUR-Lex for latest version)

¹¹⁹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1474199567547&uri=CELEX:32011R0540> (but see EUR-Lex for latest version)

¹²⁰ <https://echa.europa.eu/regulations/biocidal-products-regulation>

Commission Delegated Regulation (EU) 2017/698 of 3 February 2017 amended Delegated Regulation (EU) No 1062/2014 on the work programme for the systematic examination of all existing active substances contained in biocidal products referred to in Regulation (EU) No 528/2012.¹²¹

2.9 Products of animal origin

Regulations (EC) 853/2004 and 854/2004 control the import of products of animal origin. These are to be imported only from a third country or a part of third country that appears on a designated list.

2.10 Radioactivity

Commission Implementing Regulation (EU) 2016/6 of 5 January 2016 relaxed the special conditions governing the import of feed and food originating in or consigned from Japan following the accident at the Fukushima nuclear power station, and repealed Implementing Regulation (EU) No 322/2014.

Council Regulation (Euratom) 2016/52¹²² sets out maximum permitted levels of radioactive contamination of food and feed following a nuclear accident or any other case of radiological emergency, and repeals Regulation (Euratom) No 3954/87 and Commission Regulations (Euratom) No 944/89 and (Euratom) No 770/90. See also Welsh private water supply regulations covering monitoring of radioactivity in water (see Section 2.15).

2.11 Transmissible spongiform encephalopathies

Transmissible Spongiform Encephalopathies, TSE, are a family of diseases occurring in man and animals and are characterised by a degeneration of brain tissue to a sponge-like appearance leading to death. The family includes diseases such as Creutzfeldt-Jakob Disease, CJD, variant Creutzfeldt-Jakob Disease, vCJD and Kuru in humans, Bovine Spongiform Encephalopathy, BSE, in cattle, Scrapie in small ruminants (sheep and goats), Chronic Wasting Disease in cervids (e.g. deer) and Transmissible Mink Encephalopathy. The commonly accepted cause of the TSE diseases is a transmissible agent called a prion (PrPres), which is an abnormal form of a protein. The framework legislation is Regulation (EC) No 999/2001.¹²³

Commission Regulation (EU) 2016/1396 of 18 August 2016 amended certain Annexes to Regulation (No 999/2001). For example for the purposes of official BSE risk status recognition, “atypical BSE” – a condition believed to occur spontaneously in all cattle populations at a very low rate – was excluded. Legislative references were updated and technical labelling requirements around removal of vertebral column from carcasses were amended. Further technical amendments were made for which the reader is advised to consult Regulation 2016/1396.¹²⁴

Commission Implementing Decision (EU) 2016/2002 of 8 November 2016 amended Annex E to Council Directive 91/68/EEC, Annex III to Commission Decision 2010/470/EU and Annex II to Commission Decision 2010/472/EU concerning trade in and imports into the EU of ovine and caprine animals, and semen of animals of the ovine and caprine species in relation to the rules

¹²¹ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.103.01.0001.01.ENG&toc=OJ:L:2017:103:TOC

¹²² http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.013.01.0002.01.ENG&toc=OJ:L:2016:013:TOC

¹²³ http://ec.europa.eu/food/safety/biosafety/food_borne_diseases/tse_bse/index_en.htm

¹²⁴ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1474057348374&uri=CELEX:32016R1396>

for the prevention, control and eradication of certain transmissible spongiform encephalopathies.¹²⁵

Commission Regulation (EU) 2017/110 of 23 January 2017 amended Annexes IV and X to Regulation (EC) No 999/2001 that *inter alia*, prohibit the feeding to ruminants of protein derived from animals, except feeding to unweaned ruminants of milk replacers containing fishmeal which are produced, placed on the market and used in accordance with the specific conditions. Regulation 2017/110 allows the possibility of using starfish or farmed aquatic invertebrates, other than molluscs and crustaceans, for the production of fishmeal for unweaned ruminants.¹²⁶

Commission Regulation (EU) 2017/893 of 24 May 2017 amended Annexes I and IV to Regulation (EC) No 999/2001 of the European Parliament and of the Council and Annexes X, XIV and XV to Commission Regulation (EU) No 142/2011 as regards the provisions on processed animal protein.¹²⁷ Processed animal protein derived from insects and compound feed containing such processed animal protein is authorised for feeding aquaculture animals and other amendments are made.

Commission Regulation (EU) 2017/894 of 24 May 2017 amended Annexes III and VII to Regulation (EC) No 999/2001 as regards the genotyping of ovine animals.¹²⁸

2.12 Toxicology

EFSA have established 'OpenFoodTox', a new database that provides access to information from over 1,650 EFSA scientific outputs about the toxicity of chemicals found in the food and feed chain. An editorial published in the EFSA Journal in January 2017 describes how to use the database.¹²⁹

2.13 Veterinary residues

Commission Regulation (EU) No 37/2010 of 22 December 2009 deals with MRLs of veterinary medicinal products in foodstuffs of animal origin. Domestic effect is given by the Animals and Animal Products (Examination for Residues and Maximum Residue Limits) (England and Scotland) Regulations 2015¹³⁰ and, in Northern Ireland, by the Animal and Animal Products (Examination for Residues and Maximum Residue Limits) (Northern Ireland) 2016 (SR 54).¹³¹

Regulation (EU) No 37/2010 is regularly amended as regards MRLs. Further information is available from the European Medicines Agency (EMA)¹³² and on the European Commission website.¹³³ The latest consolidated version of Regulation 37/2010 (available on EUR-Lex) should be consulted for MRLs however there is a time-lag between amendments being made and their incorporation into the consolidated version. It is therefore best to search EUR-Lex from the date of the last amendment to ensure full coverage.

¹²⁵ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.308.01.0029.01.ENG&toc=OJ:L:2016:308:TOC

¹²⁶ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.018.01.0042.01.ENG&toc=OJ:L:2017:018:TOC

¹²⁷ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.138.01.0092.01.ENG&toc=OJ:L:2017:138:TOC

¹²⁸ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.138.01.0117.01.ENG&toc=OJ:L:2017:138:TOC

¹²⁹ <http://www.efsa.europa.eu/en/press/news/170118-0>

¹³⁰ http://www.legislation.gov.uk/ukxi/2015/787/pdfs/ukxi_20150787_en.pdf

¹³¹ http://www.legislation.gov.uk/nisr/2016/54/pdfs/nisr_20160054_en.pdf

¹³² http://www.ema.europa.eu/ema/index.jsp?curl=pages/regulation/document_listing/document_listing_000165.jsp

¹³³ http://ec.europa.eu/health/documents/community-register/index_en.htm

Toxicological evaluation of veterinary residues is carried out by the Joint FAO/WHO Expert Committee on Food Additives, JECFA, an international expert scientific committee administered jointly by the Food and Agriculture Organization of the United Nations, FAO, and the World Health Organization, WHO.¹³⁴

Commission Implementing Decision (EU) 2016/1774 of 4 October 2016 amended Decision 2010/381/EU which requires at least 10 % of consignments of aquaculture products from India for human consumption to be tested for the presence of pharmacologically active substances, in particular, chloramphenicol, tetracycline, oxytetracycline and chlortetracycline and of metabolites of nitrofurans. Decision (EU) 2016/1774 strengthened surveillance by requiring 50% of consignments to be tested but relieved Member States of the obligation for quarterly reporting in light of the implementation of the integrated computerised veterinary system ('Traces') in accordance with Article 3 of Commission Decision 2004/292/EC.¹³⁵

Commission Implementing Regulation (EU) 2017/12 of 6 January 2017 established a standard format for applications and requests to the European Medicines Agency (EMA) for the establishment of maximum residue limits in accordance with Regulation (EC) No 470/2009 of the European Parliament and of the Council. The format includes the list of information that should accompany such applications, which includes a proposed method of analysis (including limit of quantification and reference, where relevant).¹³⁶

Official sampling strategy, sampling levels and frequency are set out in Annexes III and IV to Council Directive 96/23/EC of 29 April 1996 on measures to monitor certain substances and residues thereof in live animals and animal products, (latest consolidated version 1 July 2013¹³⁷). Commission Decision 98/179/EC of 23 February 1998 (latest consolidated version 1 July 2013¹³⁸) lays down detailed rules on official sampling for the monitoring of certain substances and residues thereof in live animals and animal products and includes provision, unless technically impossible or not required by national legislation, to divide each sample into at least two equivalent sub-samples each allowing the complete analytical procedure. The subdivision can take place at the sampling location or in the laboratory.

Commission Regulation (EU) 2017/880 of 23 May 2017 set out rules on the use of a maximum residue limit established for a pharmacologically active substance in a particular foodstuff, for another foodstuff derived from the same species and a maximum residue limit established for a pharmacologically active substance in one or more species for application to other species, in accordance with Regulation (EC) No 470/2009 of the European Parliament and of the Council.¹³⁹

A summary of why and how veterinary residues are controlled in food and current problems arising from technical appeals to the Government Chemist in this area was published in the June edition of the IFST house journal FS&T.¹⁴⁰

¹³⁴ <http://www.fao.org/food/food-safety-quality/scientific-advice/jecfa/en/>

¹³⁵ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.271.01.0007.01.ENG&toc=OJ:L:2016:271:TOC

¹³⁶ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.004.01.0001.01.ENG&toc=OJ:L:2017:004:TOC

¹³⁷ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1498122962393&uri=CELEX:01996L0023-20130701>

¹³⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1498134918739&uri=CELEX:01998D0179-20130701>

¹³⁹ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.135.01.0001.01.ENG&toc=OJ:L:2017:135:TOC

¹⁴⁰ Michael Walker and Kirstin Gray, 2017, Veterinary residues in food, FS&T, 31, 23 – 27 <http://fstjournal.org/features/31-2/veterinary-residues>

2.14 Food Hygiene

Good food hygiene means controlling harmful micro-organisms, which can cause serious illness. The four essential measures are (a) to control cross-contamination, (b) effective cleaning (c) thorough cooking and (d) immediate chilling after cooking. These are summarised as ‘cook, chill, clean, separate’.¹⁴¹ HACCP (Hazard Analysis and Critical Control Point) is a key system that helps food business operators address food hygiene.¹⁴² Food Hygiene is controlled legislatively by Food Safety and Hygiene Regulations, currently the Food Safety and Hygiene (England) Regulations 2013¹⁴³ with equivalents in Wales,¹⁴⁴ Scotland¹⁴⁵ and Northern Ireland.¹⁴⁶ EU Regulation No. 2073/2005 on microbiological criteria for foods (as amended by EU Regulation No. 1441/2007) complements the food hygiene legislation and applies to all food businesses involved in the production and handling of food.¹⁴⁷ Guidance on microbiological criteria is available from Public Health England¹⁴⁸ and from IFST on aspects such as Shigatoxin-producing *E. coli*, fresh produce safety, foodborne viral infections, campylobacter, cyclospora, and cryptosporidium.¹⁴⁹

Regulation (EC) No 852/2004 of 29 April 2004¹⁵⁰ on the hygiene of foodstuffs imposes responsibilities and duties on food business operators including HACCP, temperature control, maintenance of a cold chain and sampling and analysis.

Food Hygiene (Amendment) Regulations made in England, Wales, Scotland and Northern Ireland came into force in October 2016 and made various amendments to provide for the execution and enforcement of Commission Implementing Regulation (EU) 2015/1375 laying down specific rules on official controls for *Trichinella* in meat.¹⁵¹⁻¹⁵⁴

In March 2017 Health Protection Scotland published an Incident Management Team report on a national outbreak of *Escherichia coli* O157 Phage Type 21/28 in Scotland in July-September 2016.¹⁵⁵ The incident attracted considerable publicity.

The Commission has produced a guidance document addressing microbiological risks in fresh fruits and vegetables at primary production through good hygiene (2017/C 163/01).¹⁵⁶

2.14.1 Food hygiene rating schemes

Food Hygiene Rating Schemes help consumers choose where to eat out or shop for food by giving them information about the hygiene standards in restaurants, takeaways and food shops.¹⁵⁷

¹⁴¹ <https://www.food.gov.uk/business-industry/food-hygiene>

¹⁴² <https://www.food.gov.uk/business-industry/food-hygiene/haccp>

¹⁴³ <http://www.legislation.gov.uk/ukxi/2013/2996/note/made>

¹⁴⁴ Food Hygiene (Wales) Regulations 2006 with many subsequent amendments

¹⁴⁵ Food Hygiene (Scotland) Regulations 2006 with many subsequent amendments

¹⁴⁶ The Food Hygiene Regulations (Northern Ireland) 2006 with many subsequent amendments

¹⁴⁷ <https://www.food.gov.uk/business-industry/guidancenotes/hygguid/microbiolreg>

¹⁴⁸ PHE, 2009, Ready-to-eat foods: microbiological safety assessment guidelines

<https://www.gov.uk/government/publications/ready-to-eat-foods-microbiological-safety-assessment-guidelines>

¹⁴⁹ <http://www.ifst.org/knowledge-centre/information-statements>

¹⁵⁰ Latest consolidated version 20.04.2009, <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1498136347793&uri=CELEX:02004R0852-20090420>

¹⁵¹ The Food Safety and Hygiene (England) (Amendment) Regulations 2016

<http://legislation.data.gov.uk/ukxi/2016/868/made/data.pdf>

¹⁵² The Food Hygiene (Wales) (Amendment) Regulations 2016, <http://www.legislation.gov.uk/cy/wsi/2016/845/made>

¹⁵³ The Food Hygiene (Scotland) Amendment Regulations 2016

http://www.legislation.gov.uk/ssi/2016/260/pdfs/ssi_20160260_en.pdf

¹⁵⁴ <http://www.legislation.gov.uk/nisr/2016/345/contents/made>

¹⁵⁵ <http://www.hps.scot.nhs.uk/pubs/detail.aspx?id=3200>

¹⁵⁶ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2017.163.01.0001.01.ENG&toc=OJ:C:2017:163:TOC

In England, Northern Ireland and Wales the FSA operates the Food Hygiene Rating Scheme while FSS operates the Food Hygiene Information Scheme in Scotland, all hinging on local authority hygiene inspections. The schemes in Wales and Northern Ireland have gained statutory force with the Food Hygiene Rating (Promotion of Food Hygiene Rating) (Wales) Regulations 2016, No. 429 (W. 138)¹⁵⁸ which came into force on 28 November 2016 and The Food Hygiene Rating Act (Northern Ireland) 2016.¹⁵⁹ In Wales the regulation applies to establishments which supply takeaway food and requires a conspicuous notice in Welsh and English to indicate the availability of the business food hygiene rating. The Food Hygiene Rating Regulations (Northern Ireland) 2016 no. 313¹⁶⁰ and the Food Hygiene Rating (Transitional Provisions) Order (Northern Ireland) 2016 no. 314¹⁶¹ give salient details including exemptions, the form of display of the rating and a fixed penalty notice for failure to display. The Food Hygiene Rating (2016 Act) (Commencement) Order (Northern Ireland) 2016 no. 328 appointed 7 October 2016 for the coming into operation of the Act.¹⁶² The hygiene rating is displayed on the rating sticker given by the local authority following inspection; in England Wales and Northern Ireland the rating ranges from '5' which means the food hygiene standards are very good, down to '0' where urgent improvement is necessary. In England FSA is exploring how a viable statutory scheme could be delivered in the future in line with the FSA's 'Regulating our Future' programme and in the meantime the current voluntary scheme in England is being aligned with the statutory schemes in Wales and Northern Ireland as far as possible without legislative requirements.

In December 2016 the Food Hygiene Rating (Fee and Fixed Penalty Amount) Order (Northern Ireland) 2016 was made¹⁶³ coming into force when made and establishing a fee for re-rating an establishment of £150.00 and a fixed penalty of £200.00 if, without reasonable excuse, no valid (or an invalid) food hygiene rating is displayed (or, where appropriate, made available online).

2.15 Water for human consumption

Legislation on water for human consumption is noted here, whether or not regarded as "food".

The primary EU law on supplied water is Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption, alongside Directive 2009/54/EC on the exploitation and marketing of natural mineral waters¹⁶⁴ (recast)¹⁶⁵ and Directive 2003/40/EC establishing the list, concentration limits and labelling requirements for the constituents of natural mineral waters and the conditions for using ozone-enriched air for the treatment of natural mineral waters and spring waters.¹⁶⁶

Domestic implementation of the latter two is by:

- The Natural Mineral Water, Spring Water and Bottled Drinking Water (England) Regulations 2007 (SI 2785);
- The Natural Mineral Water, Spring Water and Bottled Drinking Water (Scotland) (No. 2) Regulations 2007 (SSI 483);

¹⁵⁷ <https://www.food.gov.uk/business-industry/hygieneratings>

¹⁵⁸ http://www.legislation.gov.uk/wsi/2016/429/pdfs/wsi_20160429_mi.pdf

¹⁵⁹ Food Hygiene Rating Act (Northern Ireland) 2016, Ch 3 <http://origin-www.legislation.gov.uk/nia/2016/3/enacted>

¹⁶⁰ <http://www.legislation.gov.uk/nisr/2016/313/made>

¹⁶¹ <http://www.legislation.gov.uk/nisr/2016/314/made>

¹⁶² <http://www.legislation.gov.uk/nisr/2016/328/made/data.pdf>

¹⁶³ http://www.legislation.gov.uk/nisr/2016/425/pdfs/nisr_20160425_en.pdf

¹⁶⁴ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1453734625466&uri=CELEX:32009L0054>

¹⁶⁵ Which repeals and replaces Directive 80/777/EEC.

¹⁶⁶ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1453734764128&uri=CELEX:32003L0040>

- The Natural Mineral Water, Spring Water and Bottled Drinking Water (Wales) Regulations 2007 (SI 3165, W276);
- The Natural Mineral Water, Spring Water and Bottled Drinking Water Regulations (Northern Ireland) 2007 (SR 420).

The Natural Mineral Water, Spring Water and Bottled Drinking Water (Scotland) Amendment Regulations 2015^{167,168} amended the Natural Mineral Water, Spring Water and Bottled Drinking Water (Scotland) (No. 2) Regulations 2007 (“the 2007 Regulations”) by implementing, in relation to spring water and drinking water in a bottle, Council Directive 2013/51/Euratom laying down the requirements for the protection of the health of the general public with regard to radioactive substances in water intended for human consumption (OJ L 296, 7.11.13, p.12). Regulation 3 makes consequential amendments to the interpretation provisions in regulation 2 of the 2007 Regulations. Regulation 4 amends regulation 16 of the 2007 Regulations to specify the monitoring and sampling requirements required by Food Authorities. Similar legislation has been enacted in Wales by the Natural Mineral Water, Spring Water and Bottled Drinking Water (Wales) Regulations 2015¹⁶⁹ (SI 1867, W274) and in Northern Ireland with the Natural Mineral Water, Spring Water and Bottled Drinking Water Regulations (Northern Ireland) 2015¹⁷⁰ (SR 365).

The Natural Mineral Water, Spring Water and Bottled Drinking Water (Wales) Regulations 2015 (correction slip) of 25 May 2017 made correction to the Welsh language version of the regulations.¹⁷¹

Commission Directive 2015/1787¹⁷² amended Annexes II and III to Council Directive 98/83/EC on the quality of water intended for human consumption. The tests to be carried out to determine quality and the frequency are described, as is the requirement for laboratories using methods accredited to ISO/IEC 17025 to carry these out.

The Private Water Supplies (Wales) (Amendment) Regulations 2016 No. 411 (W. 129)¹⁷³ came into force on 14 April 2016 and amend the Private Water Supplies (Wales) Regulations 2010 to implement Council Directive 2013/51/Euratom on the protection of the health of the general public with regard to radioactive substances in water intended for human consumption from private water supplies. Regulation 3 of these Regulations inserts new regulation 10A (monitoring of radioactive substances: general) into the 2010 Regulations to make provision for new requirements in relation to monitoring for radon, tritium and indicative dose (“the radioactive substances parameters”). Regulation 3 also inserts new regulation 10B (monitoring of radioactive substances: supplies to a single dwelling not used for a commercial or public activity) into the 2010 Regulations. Further monitoring requirements are included in new Schedule 2A. Regulation 5 inserts a new Part (Part 3 – radioactive substances parameters) into Schedule 1 to the 2010 Regulations. The new Part 3 includes Table D which sets parametric values for the radioactive substances parameters. Regulations 2, 4 and 6 of these Regulations make consequential amendments in light of regulation 6. Regulation 8 of these Regulations inserts a new Part (Part 3 – monitoring for indicative dose and analytical performance characteristics) into Schedule 3 to the 2010 Regulations. The new Part 3 makes provision for additional sampling and analysis

¹⁶⁷ http://www.legislation.gov.uk/ssi/2015/363/pdfs/ssi_20150363_en.pdf
¹⁶⁸ http://www.legislation.gov.uk/ssi/2015/363/pdfs/ssics_20150363_en.pdf correction slip

¹⁶⁹ http://www.legislation.gov.uk/wsi/2015/1867/pdfs/wsi_20151867_mi.pdf

¹⁷⁰ http://www.legislation.gov.uk/nisr/2015/365/pdfs/nisr_20150365_en.pdf

¹⁷¹ http://www.legislation.gov.uk/wsi/2015/1867/pdfs/wsics_20151867_mi.pdf

¹⁷² http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2015.260.01.0006.01.ENG

¹⁷³ <http://www.assembly.wales/laid%20documents/sub-ld10651/sub-ld10651-e.pdf>

requirements in relation to the radioactive substances parameters listed in the new Table D in Part 3 of Schedule 1.

The Water Supply (Water Quality) Regulations 2016, 614,¹⁷⁴ enabling power: Water Industry Act 1991, and European Communities Act 1972 came into force on 27 June 2016. It affects:

- SI 2007/3544
- SI 2016/303 amended and SI 2002/2469
- SI 2005/2035
- SI 2007/3544
- SI 2013/235, SI 2013/1387 partially revoked and SI 2000/3184
- SI 2001/2885
- SI 2007/2734
- 2010/991 revoked.

The territorial extent is England and Wales. These Regulations supplement Chapter III of the Water Industry Act 1991 (c.56) (water supply). They also transpose requirements of Council Directive 98/83/EC on the quality of water intended for human consumption (OJ No L 330, 5.12.1998, p 32) and Council Directive 2013/51/Euratom laying down requirements for the protection of the health of the general public with regard to radioactive substances in water intended for human consumption (OJ No L 296, 7.11.2013, p 12). They are primarily concerned with the quality of water supplied in England by water undertakers and licensed water suppliers for domestic or food production purposes, and with arrangements for the publication of information about water quality. They revoke and replace the Water Supply (Water Quality) Regulations 2000 (SI 2000/3184). The regulations include detailed limits and analytical performance characteristics for a wide range of substances.

Parallel regulations, the Private Water Supplies (England) Regulations 2016, SI 618, for private supplies were made, coming into force 27 June 2016.¹⁷⁵ They revoke and replace the Private Water Supplies Regulations 2009 (SI 2009/3101).

2.16 Psychoactive substances

The Psychoactive Substances Act 2016 received Royal Assent on 28 January 2016. The act applies across the UK and came into force on 26 May 2016.¹⁷⁶

The act:

- Makes it an offence to produce, supply, offer to supply, possess with intent to supply, possess on custodial premises, import or export psychoactive substances; that is, any substance intended for human consumption that is capable of producing a psychoactive effect. The maximum sentence will be seven years' imprisonment;
- Excludes legitimate substances, such as food, alcohol, tobacco, nicotine, caffeine and medical products from the scope of the offence, as well as controlled drugs, which continue to be regulated by the Misuse of Drugs Act 1971;
- Exempts healthcare activities and approved scientific research from the offences under the act on the basis that persons engaged in such activities have a legitimate need to use psychoactive substances in their work;

¹⁷⁴ http://www.legislation.gov.uk/uksi/2016/614/pdfs/uksi_20160614_en.pdf

¹⁷⁵ <http://www.legislation.gov.uk/uksi/2016/618/contents/made>

¹⁷⁶ <http://www.legislation.gov.uk/ukpga/2016/2/contents/enacted>

- Includes provision for civil sanctions – prohibition notices, premises notices, prohibition orders and premises orders (breach of the two orders will be a criminal offence) – to enable the police and local authorities to adopt a graded response to the supply of psychoactive substances in appropriate cases;
- Provides powers to stop and search persons, vehicles and vessels, enter and search premises in accordance with a warrant, and to seize and destroy psychoactive substances.

Further information including explanatory notes is available¹⁷⁷ as well as Home Office guidance for local authorities on taking action against “head shops” selling psychoactive substances,¹⁷⁸ and Home Office guidance for retailers.¹⁷⁹ Guidance is available from the Crown Prosecution Service on psychoactive substances in general and on assessing whether or not a substance is psychoactive. It is suggested that the suspected substance must be submitted to a Forensic Service Provider for analysis and identification. Separately, an expert witness should be asked to give an opinion as to whether the identified substance was capable of having a psychoactive effect based on analysis of the identified substance in a laboratory. That opinion will be based on a chemical reference standard produced as a result of that substance having been tested previously. Further detail about psychoactivity testing is set out in the Home Office's Forensic Strategy¹⁸⁰ including on in-vitro receptor (e.g. opioid receptor) testing.

Certain enabling powers with UK applicability have also been made: the Psychoactive Substances Act 2016 (Consequential Amendments) Regulations 2016,¹⁸¹ the Psychoactive Substances Act 2016 (Commencement) Regulations 2016¹⁸² and the Magistrates' Courts (Psychoactive Substances Act 2016) (Transfer of Proceedings) Rules 2016.¹⁸³

The Psychoactive Substances Act 2016 (correction slip) noted Schedule 5, paragraph 8(2): “1A” should read “1ZA”.¹⁸⁴

Regulation (EU) No 1307/2013¹⁸⁵ establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy (Article 32(6)) provides that in order to prevent support payments being granted for illegal crops, areas used for the production of hemp may only be eligible if the varieties used have a tetrahydrocannabinol, THC, content in year on year testing not exceeding 0.2 %. See for example testing of the hemp variety ‘Finola’ in the UK.¹⁸⁶

Commission Delegated Regulation (EU) 2017/1155 of 15 February 2017, published in June 2017 amended Delegated Regulation (EU) No 639/2014 as regards the control measures relating to the cultivation of hemp with regard to farm support payments (and other farm support measures not relevant to food or feed legislation).¹⁸⁷

¹⁷⁷ <https://www.gov.uk/government/collections/psychoactive-substances-bill-2015>

¹⁷⁸ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/410961/Guidance_for_local_authorities_on_taking_action_against_10.03_15.pdf

¹⁷⁹ <https://www.gov.uk/government/publications/psychoactive-substances-act-guidance-for-retailers/psychoactive-substances-act-2016-guidance-for-retailers>

¹⁸⁰ <https://www.gov.uk/government/publications/circular-0042016-psychoactive-substances-act-2016>

¹⁸¹ <http://www.legislation.gov.uk/ukxi/2016/554/regulation/2/made>

¹⁸² <http://www.legislation.gov.uk/ukxi/2016/553/contents/made>

¹⁸³ <http://www.legislation.gov.uk/ukxi/2016/546/made>

¹⁸⁴ http://www.legislation.gov.uk/ukpga/2016/2/pdfs/ukpgacs_20160002_en.pdf

¹⁸⁵ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1499100367442&uri=CELEX:02013R1307-20150603>

¹⁸⁶ <https://www.finola.fi/seed.html>

¹⁸⁷ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.167.01.0001.01.ENG&toc=OJ:L:2017:167:TOC

Commission Recommendation (EU) 2016/2115¹⁸⁸ of 1 December 2016 has recommended monitoring for the presence of Δ^9 -tetrahydrocannabinol, its precursors and other cannabinoids in food of animal origin where there is evidence of animals being fed with feed containing hemp or hemp derived feed materials.¹⁸⁹

2.17 Herbal products and medicines

Herbal medicine has been practised in many countries for centuries with particularly strong and established traditions in some Asian countries, notably in China and India but also in Europe including the UK. In the UK, use of herbal medicines is common and it is estimated that up to 20% of the population use herbal products at some time in their lives.¹⁹⁰ Public Analysts, and hence the Government Chemist, may be called upon to examine herbal products, including herbal medicines. EU legislation on pharmaceutical products for human use also applies in general to traditional herbal medicines.¹⁹¹ However, in order to overcome difficulties encountered by Member States in applying pharmaceutical legislation to traditional herbal medicinal products in a uniform manner, a simplified registration procedure was introduced in 2004, Directive 2004/24/EC.¹⁹² A list of herbal substances, preparations and combinations for use in traditional herbal medicinal products has been established by Commission Decision 2008/911/EC of 21 November 2008.¹⁹³ This list is periodically updated; see for example (non-exhaustively) Commission Implementing Decision (EU) 2016/1659 of 13 September 2016¹⁹⁴ that introduced species of *Melaleuca* (Tea Tree oil) into the list.

In the UK Herbal medicines can be registered under the traditional herbal registration scheme and the Medicines and Healthcare products Regulatory Agency, MHRA, list of registered traditional herbal medicines is updated regularly.¹⁹⁵ A list of banned or restricted herbal products, including for example aconite, belladonna, kava-kava and ragwort, is available.¹⁹⁶

Periodic assessment of herbal products takes place, for example recently the International Agency for Research on Cancer, IARC, of the World Health Organization published an evaluation of carcinogenic risks to humans of some drugs and herbal medicines. Whole leaf extract of aloe vera, ginkgo biloba extract, goldenseal root powder, kava extract and the pulegone component of pennyroyal oils were classified in IARC Group 2B (possibly carcinogenic to humans).^{197, 198}

3 Consumer choice

This section covers (3.1) labelling (3.2) composition (3.2) food fraud/food crime, (3.3) GMOs, (3.4) cloned animals, (3.5) novel foods, (3.6) consumer attitudes and (3.7) the Consumer Rights Act 2015.

¹⁸⁸ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.327.01.0103.01.ENG&toc=OJ:L:2016:327:TOC

¹⁸⁹ <https://www.efsa.europa.eu/en/efsajournal/pub/4141>

¹⁹⁰ Walker, D. R. (2015), Report on the Regulation of Herbal Medicines and Practitioners, 26 March 2015, http://www.dcsce.net/Report_on_Regulation_of_Herbal_Medicines_and_Practitioners.pdf (Accessed 17.09.2016)

¹⁹¹ Directive 2001/83/EC <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1474128484290&uri=CELEX:02001L0083-20121116>

¹⁹² <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1474128379997&uri=CELEX:32004L0024>

¹⁹³ http://ec.europa.eu/health/human-use/herbal-medicines/index_en.htm

¹⁹⁴ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1474057348374&uri=CELEX:32016D1659>

¹⁹⁵ <https://www.gov.uk/government/publications/herbal-medicines-granted-a-traditional-herbal-registration-thr>

¹⁹⁶ <https://www.gov.uk/government/publications/list-of-banned-or-restricted-herbal-ingredients-for-medicinal-use/banned-and-restricted-herbal-ingredients>

¹⁹⁷ <http://monographs.iarc.fr/ENG/Monographs/vol108/mono108.pdf>

¹⁹⁸ Grosse *et al.*, *The Lancet Oncology*, 14, 807 – 808, <http://www.thelancet.com/journals/lanonc/article/PIIS1470-2045%2813%2970329-2/fulltext>

3.1 Food labelling

The primary legislation is now Regulation 1169/2011¹⁹⁹ on the provision of food information to consumers, EU FIC. A useful summary of links to the legislation and guidance has been provided by Dr David Jukes of the University of Reading.²⁰⁰ Domestic implementation is effected in England by the Food Information Regulations (SI 2014 No 1855),²⁰¹ in Northern Ireland by the Food Information Regulations (Northern Ireland) 2014 (SR 2014 No 223)²⁰² and, in Wales the Food Information Regulations (Wales) 2014 (SI 2014 No 2303, W227).²⁰³ In Scotland implementation is by the Food Information Regulations (Scotland) 2014 (SSI 312)²⁰⁴ which were amended in December 2015 by the Food Information (Miscellaneous Amendments) (Scotland) Regulations 2015 (SSI 410).²⁰⁵ These make a set of small drafting amendments, for example clarifying aspects of the labelling of “alcohol-free”, “dealcoholized” and “low alcohol” drinks.

Information is available on the Commission website.²⁰⁶ Guidance on nutrition labelling is also available on the Commission website.²⁰⁷

3.1.1 Country of origin labelling

The Country of Origin of Certain Meats (England) Regulations 2015 (SI 518)²⁰⁸ modified certain provisions of the Food Safety Act 1990, and implemented Articles 3 to 6 and 8 of Commission Implementing Regulation (EU) No 1337/2013 regarding the provenance or country of origin of certain types of meats (fresh, chilled and frozen meat of swine, sheep, goats and poultry). Please see our July – September 2015 report for further detail.²⁰⁹

Similar legislation has been enacted in Northern Ireland through The Country of Origin of Certain Meats Regulations (Northern Ireland) 2015²¹⁰ (SR 321) and in Wales by the Country of Origin of Certain Meats (Wales) Regulations 2015²¹¹ (SI 1591, W177).

FSA in Northern Ireland in late March 2016 issued some clarification on voluntary labelling of Country of Origin. European food labelling legislation Regulation (EU) No. 1169/2011 on Food Information to Consumers introduced in December 2014 sets out requirements for “voluntary labelling” – including country of origin – stating that any additional voluntary claims must not mislead, be ambiguous or confuse consumers. The FSA in NI note that using the additional voluntary term “Irish” on food produced in Northern Ireland may be misleading to consumers as this term is also used to describe another member state of the EU. However, whether or not the use of the term “Irish” in food labelling is misleading, can only be determined by a court of law. The FSA continues to advise local authorities in Northern Ireland on a case by case basis. Ultimately it is the food manufacturers’ responsibility not to mislead consumers with the labelling information that they provide.²¹²

¹⁹⁹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:304:0018:0063:EN:PDF>

²⁰⁰ <http://www.reading.ac.uk/foodlaw/label/links.htm>

²⁰¹ http://www.legislation.gov.uk/ukxi/2014/1855/pdfs/ukxi_20141855_en.pdf

²⁰² http://www.legislation.gov.uk/nisr/2014/223/pdfs/nisr_20140223_en.pdf

²⁰³ http://www.legislation.gov.uk/wsi/2014/2303/pdfs/wsi_20142303_mi.pdf

²⁰⁴ http://www.legislation.gov.uk/ssi/2014/312/pdfs/ssi_20140312_en.pdf

²⁰⁵ http://www.legislation.gov.uk/ssi/2015/410/pdfs/ssi_20150410_en.pdf

²⁰⁶ http://ec.europa.eu/food/food/labellingnutrition/foodlabelling/proposed_legislation_en.htm

²⁰⁷ http://ec.europa.eu/food/food/labellingnutrition/nutritionlabel/index_en.htm

²⁰⁸ http://www.legislation.gov.uk/ukxi/2015/518/pdfs/ukxi_20150518_en.pdf

²⁰⁹ <https://www.gov.uk/government/publications/food-and-feed-law-legislation-review-april-to-june-2015>

²¹⁰ http://www.legislation.gov.uk/nisr/2015/321/pdfs/nisr_20150321_en.pdf

²¹¹ http://www.legislation.gov.uk/wsi/2015/1519/pdfs/wsi_20151519_mi.pdf

²¹² <https://www.food.gov.uk/northern-ireland/news-updates/news/2016/15025/voluntary-labelling-of-country-of-origin>

3.1.2 Fish labelling

The Fish Labelling Regulations 2013 (in each UK country) as amended remain the principle statutory provisions. A short guide to the EU's new fish and aquaculture consumer labels has been produced (with thanks to Dr Stephen Pugh, for drawing attention to this).²¹³

3.1.3 Defra food labelling guidance

Defra have published guidance on the information that must be provided with food products to comply with the European Food Information to Consumers Regulation No 1169/2011 (FIC) and the Food Information Regulations 2014 (FIR).²¹⁴

3.1.4 Organic food

The principal measure is Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products.

Annex III to Commission Regulation (EC) No 1235/2008 sets out the list of third countries whose systems of production and control measures for organic production of agricultural products are recognised as equivalent to those laid down in Regulation (EC) No 834/2007. The regulation is successively updated and the latest version on EUR Lex should be consulted.

All foods sold as organic must originate from growers, processors and importers who are registered with an approved certification body and subject to regular inspection. A Defra list of UK approved organic control bodies is available.²¹⁵

Commission Implementing Regulation (EU) 2016/1842 of 14 October 2016 amended Regulation (EC) No 1235/2008 including on electronic certificates of inspection for imported organic products, and Regulation (EC) No 889/2008 on requirements for preserved or processed organic products and the transmission of information. This was to reduce divergent application of control measures by member States.²¹⁶

Commission Implementing Regulation (EU) 2017/838 of 17 May 2017 amended Regulation (EC) No 889/2008 as regards feed for certain organic aquaculture animals. Under Regulation (EC) No 889/2008, the animals concerned are to be fed with feed naturally available in ponds and lakes but permits the use of organic feed of plant origin or seaweed where natural feed resources are not available in sufficient quantities and establishes maximum percentages of fishmeal and fish oil that can be included in the feed ration of siamese catfish and shrimps where naturally available feed is supplemented. Naturally occurring feed is limited or non-existent in the hatchery stage and the rules on feeding penaeid shrimps, in particular Tiger shrimp (*Penaeus monodon*) would lead to malnutrition and increased mortality if applied in the juvenile stages in a hatchery environment. The Regulation is amended accordingly.²¹⁷

3.1.5 Net Quantities

²¹³ http://ec.europa.eu/fisheries/documentation/publications/eu-new-fish-and-aquaculture-consumer-labels-pocket-guide_en.pdf

²¹⁴ <https://www.gov.uk/guidance/food-labelling-giving-food-information-to-consumers>

²¹⁵ <https://www.gov.uk/government/publications/organic-certification-list-of-uk-approved-organic-control-bodies>

²¹⁶ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.282.01.0019.01.ENG&toc=OJ:L:2016:282:TOC

²¹⁷ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32017R0838>

Minor corrections were made to the Weights and Measures (Food) (Amendment) Regulations (Northern Ireland) 2016 No. 187 that originally came into operation on 18 April 2016. These Regulations remove provisions from weights and measures law applying in Northern Ireland that overlap or conflict with Regulation (EU) No 1169/2011 (provision of food information to consumers, FIC) and enable the enforcement of certain provisions of the FIC that relate to net quantity. An extensive explanatory note accompanies the main regulations.²¹⁸

3.1.6 Protected names and quality schemes

There are three protection marks in the EU:²¹⁹

- Protected geographical indication (PGI)
- Protected designation of origin (PDO)
- Traditional speciality guaranteed (TSG).

A list of UK protected names and a list of UK applications being considered is available.²²⁰

Regulation (EU) No 1151/2012 of the European Parliament and of the Council of 21 November 2012 sets out the rules on quality schemes for agricultural products and foodstuffs, including PGI, PDO and TSG.²²¹

3.2 Composition

3.2.1 Casein and caseinates

Directive (EU) 2015/2203 of the European Parliament and of the Council of 25 November 2015 brought up to date the approximation of the laws of the Member States relating to caseins and caseinates intended for human consumption and repeals Council Directive 83/417/EEC.²²² The Directive defines the production, composition and labelling of casein and caseinates and stems from an international standard for edible casein products by the *Codex Alimentarius* Commission ('Codex standard for edible casein products').²²³ Domestic implementation was formalised in late 2016 by the Caseins and Caseinates (Wales) Regulations 2016 No.1130 (W.270)²²⁴ and the Caseins and Caseinates Regulations (Northern Ireland) 2016 No.415.²²⁵ The Caseins and Caseinates (Scotland) Regulations 2016 No.383²²⁶ were made but were replaced on 15 December 2016 by the Caseins and Caseinates (Scotland) (No. 2) Regulations 2016²²⁷ owing to defects in S.S.I. 2016/383. Previous measures on caseins in each country of the UK are revoked. The compositional criteria include minimum milk protein in dry matter, minimum content of casein in milk protein (95.0% m/m), maximum water content, maximum milkfat, ash, maximum lactose and pH.

²¹⁸ The Weights and Measures (Food) (Amendment) Regulations (Northern Ireland) 2016, No. 187 and correction slip,

<http://www.legislation.gov.uk/nisr/2016/187/regulation/1/made>

²¹⁹ http://ec.europa.eu/agriculture/quality/schemes/index_en.htm

²²⁰ <https://www.gov.uk/guidance/eu-protected-food-names-how-to-register-food-or-drink-products>

²²¹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1488746464115&uri=CELEX:02012R1151-20130103>

²²² <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1481228098768&uri=CELEX:32015L2203>

²²³ Codex Alimentarius Standard For Edible Casein Products CODEX STAN 290-1995 [http://www.fao.org/fao-who-codexalimentarius/sh-](http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252Fstandards%252FCODEX%252FBSTAN%252B290-1995%252FCXS_290e.pdf)

[proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252Fstandards%252FCODEX%252FBSTAN%252B290-1995%252FCXS_290e.pdf](http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252Fstandards%252FCODEX%252FBSTAN%252B290-1995%252FCXS_290e.pdf)

²²⁴ <http://legislation.data.gov.uk/wsi/2016/1130/contents/made/data.htm?wrap=true>

²²⁵ <http://www.legislation.gov.uk/nisr/2016/415/contents/made>

²²⁶ http://www.legislation.gov.uk/ssi/2016/383/pdfs/ssi_20160383_en.pdf

²²⁷ http://www.legislation.gov.uk/ssi/2016/422/pdfs/ssi_20160422_en.pdf

3.2.2 International Standards for Fruit and Vegetables

These publications provide illustrations and commentary that facilitate the common interpretation of standards in force regarding the quality of various fruits and vegetables being traded internationally. They are published under the Scheme for the Application of International Standards for Fruit and Vegetables set up by the OECD in 1962.²²⁸

3.2.3 Honey

The making and coming into force of the Honey (Wales) Regulations 2015²²⁹ (SI 1507, W174) completed the updating of domestic implementation of Council Directive 2001/110/EC relating to honey.²³⁰ These regulations sit alongside the Honey (Scotland) Regulations 2015 (SSI 208),²³¹ the Honey Regulations (Northern Ireland) 2015 (SR 261),²³² and the Honey Regulations (England) 2015²³³ (SI 1348) all revoking their 2003 predecessors. The Regulations regulate the use of the names “honey”, “blossom honey”, “nectar honey”, “honeydew honey”, “comb honey”, “chunk honey” and “cut comb in honey”, “drained honey”, “extracted honey”, “pressed honey”, “filtered honey” and “baker’s honey”.

Compositional criteria and labelling are prescribed and an obligation is imposed on food authorities to enforce the Regulations. Provisions of the Food Safety Act 1990 enabling an improvement notice to be served requiring compliance with specified provisions of the Regulations are included and failure to comply with an improvement notice is an offence.

The Food Information Regulations 2014 are amended with a transitional provision in respect of food placed on the market or labelled before 24 June 2015, prohibiting an improvement notice from being served in relation to such food if it would have been compliant with the 2003 Honey Regulations.

A coordinated control plan to assess the prevalence on the market of honey adulterated with sugars and honeys mislabelled with regard to their botanical source or geographical origin is described on the Commission website.²³⁴ The non-compliances detected by the Member States were mostly related to the declaration of the botanical source (7%) and to adulteration with sugar (6%). Non-compliances related to the declaration of the geographical origin were less frequent (2%). Some non-compliances related to the botanical source are probably unintentional and the result of bees foraging a wide variety of plants, despite the hives being very close to the plant species identified as the botanical source. Member States also submitted to the Commission Joint Research Centre, JRC,²³⁵ 893 samples of honey which they had found to be compliant or suspicious. The JRC applied liquid chromatography-isotope ratio mass spectrometry, which can better distinguish different sugars than current validated methods. The findings²³⁶ were that 14 % of the samples they tested contained added sugar. This was further broken down according to geographical origin, point of collection (i.e. producer, packager or retailer) and type of honey. Overall, the results from the honey coordinated control plan indicate that the practice of adding sugars to honey is occurring, both within the EU and in third countries. The Commission will discuss with the relevant stakeholders an appropriate follow-up to this control plan.

²²⁸ http://www.oecd-ilibrary.org/agriculture-and-food/international-standards-for-fruit-and-vegetables_19935668

²²⁹ http://www.legislation.gov.uk/wsi/2015/1507/pdfs/wsi_20151507_mi.pdf

²³⁰ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1445979649018&uri=CELEX:02001L0110-20140623>

²³¹ <http://www.legislation.gov.uk/ssi/2015/208/contents/made>

²³² <http://www.legislation.gov.uk/nisr/2015/261/contents/made>

²³³ http://www.legislation.gov.uk/uksi/2015/1348/pdfs/uksi_20151348_en.pdf

²³⁴ https://ec.europa.eu/food/safety/official_controls/food_fraud/honey_en

²³⁵ <https://ec.europa.eu/jrc/en>

²³⁶ https://ec.europa.eu/food/sites/food/files/safety/docs/oc_control-progs_honey_jrc-tech-report_2016.pdf

The New Zealand Ministry for Primary Industries has published scientific definition for New Zealand mānuka honey.²³⁷

3.2.4 Marketing of agricultural products

Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishes a common organisation of the markets in agricultural products.²³⁸

This is an extensive piece of legislation that covers the following commodity sectors: cereals, rice, sugar, dried fodder, seeds, hops, olive oil and table olives, flax and hemp, fruit and vegetables, processed fruit and vegetable products, wine, live trees and other plants, bulbs, roots and the like, cut flowers and ornamental foliage, tobacco, beef and veal, milk and milk products, pigmeat, sheepmeat and goatmeat, eggs, poultrymeat, ethyl alcohol of agricultural origin, apiculture products, silkworms, and other products. The Single Common Market Organisation (Consequential Amendments) Regulations 2013²³⁹ make appropriate changes to a wide range of domestic law including, for example, the Drinking Milk (England) Regulations, the Poultrymeat (England) Regulations, and the Spreadable Fats (Marketing Standards) Regulations. A correction slip was issued in September 2016²⁴⁰ amending minor drafting errors in the 2013 regulations.

3.2.5 Meat products

The Products Containing Meat etc. Regulations 2014 enacted in England (e.g. SI 3001/2014²⁴¹), Scotland, Wales and Northern Ireland lay down definitions and minimum meat content standards for certain meat products presented for sale directly to the consumer (see our report for October – December 2014).²⁴²

Similar Regulations have been enacted in Scotland with the Products Containing Meat etc. Regulations (Scotland) Regulations 2014 (SSI 289/2014)²⁴³ which revokes the Meat Products (Scotland) Regulations 2004 (SSI 6/2004), the Meat Products (Scotland) Amendment Regulations 2008 (SSI 97/2008) and regulation 18(4) of the Food Additives (Scotland) Regulations 2009 (SSI 436/2009), and in Northern Ireland with the Products Containing Meat etc. Regulations (Northern Ireland) 2014²⁴⁴ (SR 285/2014).

There was a technical amendment to the Scottish regulations inserting a reference to section 22 of the Food Safety Act 1990 (defence of publication in the course of business) by the Products Containing Meat etc. (Scotland) Amendment Regulations 2016 (SSI 24/2016).²⁴⁵

3.2.6 Olive oil and table olives

Pursuant to Article 91 of Regulation (EU) No 1308/2013 on the common organisation of the markets in agricultural products, Commission Regulation (EEC) No 2568/91 defines the chemical and organoleptic characteristics of olive and olive-pomace oil, and lays down methods of assessing those characteristics. Regulation (EEC) No 2568/91 methods are regularly updated in

²³⁷ <https://www.mpi.govt.nz/growing-and-producing/bees-and-other-insects/manuka-honey/>

²³⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32013R1308>

²³⁹ http://www.legislation.gov.uk/ukxi/2013/3235/pdfs/ukxi_20133235_en.pdf

²⁴⁰ <http://www.legislation.gov.uk/ukxi/2013/3235/made>

²⁴¹ http://www.legislation.gov.uk/ukxi/2014/3001/pdfs/ukxi_20143001_en.pdf

²⁴² <https://www.gov.uk/government/publications/food-and-feed-law-legislation-review>

²⁴³ http://www.legislation.gov.uk/ssi/2014/289/pdfs/ssi_20140289_en.pdf

²⁴⁴ http://www.legislation.gov.uk/nisr/2014/285/pdfs/nisr_20140285_en.pdf

²⁴⁵ http://www.legislation.gov.uk/ssi/2016/24/pdfs/ssi_20160024_en.pdf

line with the work of the International Olive Council. The Olive Oil (Marketing Standards) Regulations 2014, which apply to the whole of the UK, and for which a correction slip has been issued (September 2016) implement the above.²⁴⁶ The general position of the Commission as regards upcoming International Olive Council analytical matters was set out in Council Decision (EU) 2016/1080 of 27 June 2016.²⁴⁷ Guidance on olive oil composition, characteristics and labelling is available from Defra.²⁴⁸

3.2.7 Spices

The British Retail Consortium (BRC), Food and Drink Federation (FDF) and Seasoning and Spice Association (SSA) in liaison with the FSA and FSS have issued guidance for food companies that use culinary dried herbs and spices with information on best practice in assessing and protecting the authenticity of these products.^{249, 250}

3.2.8 Spirit drinks etc.

Regulation (EC) No 110/2008 of the European Parliament and of the Council of 15 January 2008 controls the definition, description, presentation, labelling and the protection of geographical indications of spirit drinks.²⁵¹ Commission Regulation (EC) No 2870/2000²⁵² lists and describes the reference methods for the analysis of spirit drinks.

The Commission aims better to align the existing Regulation (EC) No 110/2008 on spirit drinks with the Treaty on the Functioning of the European Union. In June 2017 the European Economic and Social Committee published²⁵³ a generally supportive opinion on the proposal. On presentation and labelling, the Committee suggested avoiding any kind of misrepresentation or misunderstanding in relation to 'imitation flavours'; Article 8(5) of the Commission proposal specifies that the sales denominations supplemented by the term 'flavour' (or any other similar terms) may be used to refer to flavourings that imitate a spirit drink or their use in the production of a foodstuff other than a beverage. The Committee considered that this provision could be misleading for consumers. The Committee also requested strengthened arrangements to allow fake spirits to be removed from the market.

3.2.9 Wine

Wine law is complex and extensive; a readable guide is on the FSA website with links to European legislation.²⁵⁴ Regulation 1308/2013 on the common organisation of the markets in agricultural products also applies, (see Section 3.2.4). There is no ready compendium of EU legislation on wine.

A search of EUR-Lex for 'wine' yields an unmanageable number of hits however it is possible to narrow this down by selecting legislation and searching on a year by year basis.

²⁴⁶ <http://origin-www.legislation.gov.uk/ukxi/2014/195/contents/made>

²⁴⁷ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1474057348374&uri=CELEX:32016D1080>

²⁴⁸ <https://www.gov.uk/guidance/olive-oil-regulations-and-inspections>

²⁴⁹ <https://www.fdf.org.uk/news.aspx?article=7539>

²⁵⁰ <https://www.fdf.org.uk/herbs-spices-guidance.aspx>

²⁵¹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1474277348569&uri=CELEX:02008R0110-20160705>

²⁵² <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1499102421377&uri=CELEX:02000R2870-20160426>

²⁵³ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2017.209.01.0054.01.ENG&toc=OJ:C:2017:209:TOC

²⁵⁴ <https://www.food.gov.uk/business-industry/winestandards/lawguide>

Recent updates include Commission Delegated Regulation (EU) 2017/670²⁵⁵ of 31 January 2017, published in April 2017, supplementing Regulation (EU) No 251/2014²⁵⁶ on authorised production processes for aromatised wine products, which includes, for example, vermouth and sangria. Regulation 2017/670 updates the production processes recommended and published by the International Organisation of Vine and Wine, OIV²⁵⁷ which provides much useful information including methods of analysis.

3.2.10 Water in frozen poultry

As with all animal species, poultry contains naturally present water, known as the 'physiological water'. Commercial processing in accordance with good manufacturing practice adds an amount of technically unavoidable water known as 'extraneous water'. European legislation²⁵⁸ sets limits for 'extraneous water' so that consumers are not being disadvantaged by excess 'extraneous water' in poultry meat they purchase.

A study funded by the European Commission and undertaken by LGC²⁵⁹ has provided a comprehensive account of the current technologies used in the processing of poultry in the EU and the amount of technologically unavoidable water added to broiler chickens by different chilling methods.

The results obtained showed that the largest observed effect on the water/protein ratio was for portion type, with 'breast' behaving very differently to 'leg' and 'carcase'. Chilling method did not have a significant effect on 'breast' and provides evidence for retention of a single legal limit for breast fillet. Immersion chilling adds significantly more water to 'leg' and 'carcase' than any other chilling method. This provides evidence for retention of a separate legal limit for immersion chilled carcasses but there is no strong evidence to require different limits for the other four chilling methods. 'Leg' also behaved very similarly to 'carcase' in this study. Thus it would be prudent to retain a separate legal limit for immersion chilled leg. Although this study has provided valuable information, data sets for some of the variables studied were small owing to the unavailability of some of the required samples, hence the results from this study should be treated with caution in considering future legislative limits.²⁶⁰

An interesting court case on water in poultry came before the (European) Court of Justice (Forth Chamber) with judgement given on 9 March 2017. This was a request for a preliminary ruling from a French court on Regulation (EC) No 543/2008 – Article 15(1) – Article 16 – Frozen or quick-frozen chickens – Maximum limit for water content. The questions for the court were as follows²⁶¹.

1. Does compliance with the water-content threshold laid down by Article 15 of Regulation (EC) No 543/2008, in conjunction with Annexes VI and VII thereto, constitute a requirement of 'sound and fair marketable quality' within the meaning of Article 28(1) of Commission

²⁵⁵ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.097.01.0005.01.ENG&toc=OJ:L:2017:097:TOC

²⁵⁶ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1498062395786&uri=CELEX:02014R0251-20140327>

²⁵⁷ <http://www.oiv.int/>

²⁵⁸ Regulation (EU) No 1308/2013 of the European Parliament and of the Council establishing a common organisation of the markets in agricultural products <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1501780319097&uri=CELEX:02013R1308-20170801> and Commission Regulation (EC) No 543/2008 laying down detailed rules for the application of Council Regulation (EC) No 1234/2007 as regards the marketing standards for poultrymeat: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32008R0543>.

²⁵⁹ <http://www.lgcgroup.com/about-us/media-room/latest-news/2017/lgc-completes-study-to-establish-uptake-of-water-d/#.WUzKHbpFxmU>

²⁶⁰ https://ec.europa.eu/agriculture/sites/agriculture/files/external-studies/2016-water-in-poultrymeat/final-report_en.pdf

²⁶¹ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2015.190.01.0004.01.ENG&toc=OJ:C:2015:190:TOC

- Regulation (EC) No 612/2009 and of the judgment of the Court of Justice in *Nowaco Germany* (C-353/04, EU:C:2006:522)?
2. Can frozen poultry with a water content exceeding the threshold laid down by Article 15 of Regulation (EC) No 543/2008, in conjunction with Annexes VI and VII thereto, accompanied by a health certificate issued by the competent authority, be marketed within the European Union in normal conditions, within the meaning of Article 28 of Regulation (EC) No 612/2009, and, if so, in what conditions?
 3. Is the fact that the water-content threshold remains at 5.1 % under Annex VI to Regulation (EC) No 543/2008, and has not been revised for several decades, despite alleged changes in rearing practices and criticism in certain scientific studies that that threshold is obsolete, compatible or incompatible with EU law, and in particular with the principle of legal certainty?
 4. Are Annexes VI and VII to Regulation (EC) No 543/2008 sufficiently precise for the checks provided for by Article 15 of that regulation to be carried out, or was France under an obligation to lay down 'practical measures for the checks' 'at all stages of marketing', failing which checks carried out at the stage of exportation of the goods cannot be relied upon?
 5. Can the requests for counter-analyses which are provided for by Article 16(2) and (5) of Regulation No 543/2008 in respect of the results of slaughterhouse checks be extended to checks carried out at the stage of marketing of export products, in the presence of the parties, pursuant to, inter alia, Article 41 of the Charter of Fundamental Rights of the European Union?

The judgement of the Court of Justice²⁶² upheld the current law and confirmed that frozen or quick-frozen chickens with a water content exceeding the limits are not marketable in the EU and do not satisfy the requirement of sound and fair marketable quality. However the Court affirmed that an exporter of frozen or quick-frozen chickens may be present or represented when the goods are examined and when samples are taken and may request a further examination or sampling of the goods if he considers that the results obtained by the competent authorities are not valid.

The Court summarised its findings thus:²⁶³

1. The examination of the third question did not bring to light any evidence able to affect the validity of the limits for water content in frozen chicken meat laid down in Article 15(1) and Annexes VI and VII to Commission Regulation (EC) No 543/2008 of 16 June 2008 laying down detailed rules for the application of Council Regulation (EC) No 1234/2007 as regards the marketing standards for poultrymeat, as amended by Commission Implementing Regulation (EU) No 1239/2012 of 19 December 2012.
2. Article 28(1) of Commission Regulation (EC) No 612/2009 of 7 July 2009 on laying down common detailed rules for the application of the system of export refunds on agricultural products, as amended by Commission Regulation (EU) No 173/2011 of 23 February 2011, must be interpreted as meaning that frozen or quick-frozen chickens with a water content exceeding the limits set by Regulation No 543/2008, as amended by Implementing Regulation No 1239/2012, are not marketable in normal conditions on the territory of the European Union and do not satisfy the requirement of sound and fair marketable quality, even if they are accompanied by a health certificate issued by the competent authority.
3. Since Annexes VI and VII to Regulation No 543/2008, as amended by Implementing Regulation No 1239/2012, are sufficiently precise for the purpose of carrying out the checks on frozen and quick-frozen chickens intended for export with export refunds, the fact that a

²⁶² <http://curia.europa.eu/juris/document/document.jsf?docid=188754&doclang=en>

²⁶³ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2017.144.01.0002.01.ENG&toc=OJ:C:2017:144:TOC#ntr1-C_2017144EN.01000201-E0001

Member State has not adopted practical measures, whose adoption is provided for in Article 18(2) of that regulation, does not prevent those checks from being relied on against the undertakings concerned.

4. An exporter of frozen or quick-frozen chickens may, in accordance with Article 118(2) and Article 119(1), second subparagraph, of Regulation (EC) No 450/2008 of the European Parliament and of the Council of 23 April 2008 laying down the Community Customs Code (Modernised Customs Code) may, first, be present or represented when the goods are examined and when samples are taken and, second, may request a further examination or sampling of the goods if he considers that the results obtained by the competent authorities are not valid.

3.3 Genetically modified organisms

Regulation (EC) No 1829/2003 of the European Parliament and of the Council provides for the authorisation, labelling and supervision of genetically modified food and feed.²⁶⁴

Commission Implementing Decisions on GMOs are recorded in relevant updates of this section but are not retained in the text going forward. For a register of EU authorised GMOs and those withdrawn from the market see the GMO register on the Commission website.²⁶⁵ Labelling, environmental and post-market monitoring, a detection method and reference material are normally detailed in the Decisions.

3.3.1 Cultivation of GMOs

Commission Directive 2015/412²⁶⁶ amends Directive 2001/18/EC as regards the possibility for the Member States to restrict or prohibit the cultivation of genetically modified organisms (GMOs) in their territory. This devolves responsibility in this matter to Member States. See our previous quarterly report²⁶⁷ for further details.

3.4 Cloned animals

Cloning involves the removal of the nucleus from a somatic cell (any body tissue) of an animal and its transfer into an enucleated egg (an egg cell that has had its own nucleus removed) of a donor female of the same species. This is then stimulated to generate an embryo for transfer into a surrogate mother. In April 2016 the Defra Farm Animal Genetic Resources Committee issued a statement on cloning of farm animals. EU legislation regards foods and food ingredients derived from clones as novel foods. However, the European Commission and both the European Food Safety Authority and the UK Food Standards Agency acknowledge that meat and milk from healthy clones and healthy offspring of clones is indistinguishable from, and as safe as that from, conventionally bred animals. The Committee believes that both UK and EU policy should be based on evidence, and as such does not consider that there is any scientific justification for treating the products of the healthy offspring of clones, including semen and embryos, any differently from conventionally bred animals with regard to the production of food. The Committee notes that, in past trials, some cloned progeny have not developed normally, leading to significant welfare problems and premature death.²⁶⁸

²⁶⁴ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1436450297142&uri=CELEX:02003R1829-20080410>

²⁶⁵ http://ec.europa.eu/food/plant/gmo_en

²⁶⁶ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2015.068.01.0001.01.ENG

²⁶⁷ <https://www.gov.uk/government/publications/food-and-feed-law-legislation-review-april-to-june-2015>

²⁶⁸ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/524769/fanqr-cloning-farm-animals-statement.pdf

The Government Chemist last looked at the analytical science of cloned animals in 2012 when it was found that reproducible traits that would be discriminatory for healthy adult cloned animals could not be defined.²⁶⁹ This appears still to be the case.

3.5 Novel foods

Novel foods and novel food ingredients are regulated by Regulation (EC) No 258/97 due to be replaced on 1 January 2018 by Regulation (EU) 2015/2283 of the European Parliament and of the Council of 25 November 2015 on novel foods.²⁷⁰ A Commission Q&A is available²⁷¹ and a list of authorisations.²⁷² The new regulation introduces a centralised authorisation procedure with EFSA conducting the scientific risk assessment and also introduces a notification procedure for traditional food from third countries. New EFSA guidance documents were finalised and adopted in November 2016.²⁷³

3.6 Consumer attitudes

The Food Standards Agency publishes regular reports of surveys into information about the public's self-reported behaviours, attitudes and knowledge relating to food issues. The latest such report, published on 30 March 2017,²⁷⁴ found that broad consumer trends in relation to food remained largely consistent with previous waves of the survey. Consumers reported a number of practices that are in line with FSA recommendations on food safety in the home:

- More than eight out of ten respondents reported hand washing behaviours in line with recommended practices, saying they always washed their hands before starting to prepare or cook food (86%), and immediately after handling raw meat, poultry or fish (87%).
- The FSA recommends that the use by date is the best indicator of whether food is safe to eat, and this was cited as an indicator by 75% of respondents. While similar to the proportions in Wave 2 and Wave 3, this was higher than the proportion in Wave 1 (62%).

The survey also flagged some areas where consumers report not following recommended best practice. The most common method reported to defrost meat or fish was leaving meat or fish at room temperature (58%), which is not recommended, (defrost in the fridge).

The findings also help to build a picture of consumers' eating out practices and highlight the importance of cleanliness and hygiene when people decide where to eat out. For example when shown a list of factors which might influence their decision on where to eat out, 72% reported that the cleanliness and hygiene of the establishment was important to them; overall a third (30%) of respondents who ate out considered this the most important factor.

New questions introduced in this wave provide some important insights to inform the Food Standards Agency's future work including:

- Questions on allergy and intolerance which show that of those who reported an adverse reaction or avoided certain foods, the most common foods that people reported having an

²⁶⁹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/332618/Cloned_animal_report.pdf

²⁷⁰ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2015.327.01.0001.01.ENG&toc=OJ:L:2015:327:TOC

²⁷¹ http://europa.eu/rapid/press-release_MEMO-15-5875_en.htm

²⁷² http://ec.europa.eu/food/safety/novel_food/authorisations/list_authorisations/index_en.htm

²⁷³ <https://www.efsa.europa.eu/en/press/news/161110>

²⁷⁴ <https://www.food.gov.uk/news-updates/news/2017/16111/latest-food-and-you-survey-report-published>

adverse reaction to were cows' milk and cows' milk products (22%), cereals containing gluten (13%) and molluscs, e.g. mussels, oysters (11%).

Similar surveys were conducted in Wales and Northern Ireland.

Key findings from Northern Ireland²⁷⁵ include:

- More than eight out of 10 respondents in Northern Ireland reported hand washing behaviours in line with recommended practices, saying they always washed their hands before starting to prepare or cook food (85%), and immediately after handling raw meat, poultry or fish (87%).
- When asked which methods they used to defrost meat or fish, the most common method was leaving meat or fish at room temperature (65%), which is not recommended.
- Respondents living in Northern Ireland, compared to those living in England, were more likely to agree that they recognised the Food Hygiene Rating Scheme (89% compared with 82%).

The findings also highlighted cooking, shopping and eating habits:

- Women in Northern Ireland were more likely than men to have all the responsibility for cooking or preparing food in the home (66% compared with 27%). And the proportion of women who reported having all or most of the responsibility for food shopping was more than twice the proportion of men (68% compared with 24%).
- When asked about the recommended number of calories average men and women should eat in a day, 38% mentioned 2,500 calories for men, and 41% mentioned 2,000 calories for women, both in line with recommendations.
- People in Northern Ireland were most likely to mention restaurants (58%), fast food restaurants (52%), and takeaway outlets (47%) as places where they would like to see more information about healthy eating options.

In Wales,²⁷⁶ hand washing was at a similar level to Northern Ireland with more than 8 out of 10 respondents reporting hand washing behaviours in line with recommended practices, saying they always washed their hands before starting to prepare or cook food (86%), and immediately after handling raw meat, poultry or fish (89%). The FSA recommends that the use by date is the best indicator of whether food is safe to eat, and this was cited as an indicator of whether food was safe to eat by 80% respondents in Wales. Welsh respondents (56%) also left meat or fish at room temperature to defrost which is not recommended. The findings also help to build a picture of Welsh consumer's eating out practices and highlight the importance of cleanliness and hygiene when people decide where to eat out. When shown a list of factors which might influence their decision on where to eat out, 71% of respondents in Wales reported that the cleanliness and hygiene of the establishment was important to them; overall a third (34%) of respondents who ate out considered this the most important factor. New questions introduced in this wave included questions on allergy and intolerance showing that of those in Wales who reported an adverse reaction or avoided certain foods, the most common foods that people reported having an adverse reaction to were cows' milk and cows' milk products (25%), cereals containing gluten (11%) and eggs (8%).

²⁷⁵ <https://www.food.gov.uk/news-updates/news/2017/16162/latest-food-and-you-survey-report-published-for-northern-ireland>
²⁷⁶ <https://www.food.gov.uk/wales/news-updates/news/2017/16164/latest-food-and-you-survey-report-published-for-wales>

3.7 The Consumer Rights Act 2015

The Consumer Rights Act 2015, which in certain circumstances may be applicable to food, became law on 1 October 2015, replacing three major pieces of consumer legislation – the Sale of Goods Act, Unfair Terms in Consumer Contracts Regulations and the Supply of Goods and Services Act.^{277, 278}

4 Health and nutrition

4.1 Nutrition and health claims

Regulation (EC) No 1924/2006 on nutrition and health claims made on foods governs the use of these claims in the labelling, presentation and advertising of foods. It aims at enabling consumers to make healthier choices by protecting them from misleading information and ensuring a level playing field for food businesses to operate within the single market. Since its adoption in 2006, the implementation of the Regulation remains incomplete since nutrient profiles, that the Commission was requested to set by January 2009, have not been established and health claims on plants and their preparations used in foods are not yet fully regulated. The Commission's plan to carry out a REFIT evaluation of the EU legislation on nutrition and health claims was announced in its Better Regulation Communication of 19 May 2015. This REFIT evaluation aims at focusing on nutrient profiles and health claims on plants and their preparations added to foods. It also aims at considering the more general regulatory framework for the use of such substances in foods since it is closely related to the use of health claims. A route-map and progress are available.²⁷⁹

Guidance on nutrition labelling is available on the Commission website.²⁸⁰ Commission Regulation (EU) No 432/2012 established the list of permitted health claims and started to apply from 14 December 2012.²⁸¹ The EU Register of nutrition and health claims is also available²⁸² hence successive amendments to Regulation 432/2012 are not usually recorded here unless a change is made that requires further explanation.

An example of the complexities of nutrition claims regulation is a case that occurred in August 2016 when Commission Regulation (EU) 2016/1413²⁸³ amended Regulation (EU) No 432/2012 in respect of two claims authorised for meal replacement for weight control. The conditions of use of those claims require that in order to bear them, the food should contain a maximum of 250 kcal per serving and comply with specifications laid down in Directive 96/8/EC. However Directive 96/8/EC has been replaced by Regulation 609/2013 (see Section 4.2) therefore, the references to Directive 96/8/EC needed to be replaced. Regulation 1169/2011 on the provision of food information to consumers (see Section 3.1) sets out nutrient reference values for vitamins and minerals that differ from some of those in Directive 96/8/EC.

The advice of EFSA was that this did not impact upon the substantiation of the two health claims and, further, there was no need to require that meal replacement for weight control provides at least 30 % of the nutrient reference values of fluoride, chromium, chloride and molybdenum per

²⁷⁷ <https://www.gov.uk/government/publications/consumer-rights-act-2015/consumer-rights-act-2015>

²⁷⁸ <http://www.which.co.uk/consumer-rights/regulation/consumer-rights-act>

²⁷⁹ http://ec.europa.eu/food/safety/labelling_nutrition/claims/refit/index_en.htm

²⁸⁰ http://ec.europa.eu/food/food/labellingnutrition/nutritionlabel/index_en.htm

²⁸¹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0432>

²⁸² http://ec.europa.eu/food/safety/labelling_nutrition/claims/register/index_en.htm

²⁸³ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1474057348374&uri=CELEX:32016R1413>

meal as laid down in Regulation (EU) No 1169/2011. Regulation 1169/2011 does not set a nutrient reference value for sodium. However, taking into account the intended use of meal replacement for weight control products, the requirement to provide 30 % of the sodium amount per meal as laid down in Directive 96/8/EC was maintained. A nutrient reference value for potassium is set at 2000 milligrams in Regulation 1169/2011. Directive 96/8/EC did not require for meal replacement for weight control to provide 30 % of the potassium value, but set a minimum amount at 500 milligram per meal and this value was maintained. The requirements set out in Directive 96/8/EC on fat, protein and amino acids were also maintained. Mandatory labelling particulars included in Directive 96/8/EC were maintained and a transitional period from 21 July 2016 until 14 September 2019 applies overall.

Regular bulletins are available from the Department of Health on EU legislation on nutrition and health claims.²⁸⁴

The assessment of some botanical claims is ‘on hold’²⁸⁵ and an action was brought against the Commission for failure to act in that the Commission has unlawfully failed to initiate the assessment of health claims on botanical substances by EFSA. However this was dismissed by the court, see Order of the Court (Eighth Chamber) of 25 October 2016 – VSM Geneesmiddelen BV v European Commission, (Case C-637/15 P).²⁸⁶⁻²⁸⁸

Belgium has published a new decree, updating the “BELFRIT” project, a close cooperation between Belgium, France and Italy to harmonize the legislation on botanicals in food supplements. The number of plants authorized in food supplements in Belgium has increased significantly, from about 645 to more than 1000 plants. Consequently a considerable number of new conditions of use are now applicable. New maximum levels and mandatory warnings for about 250 plants will have to be taken into account when notifying food supplements. As a transitional measure, foodstuffs that do not comply with the provisions of the new decree, but conform with the provisions of the former decree, can still be placed on the market until 20 February 2019.²⁸⁹

4.1.1 Committee on Advertising Practice, CAP

On 9 December 2016 CAP announced new restrictions on advertising to children which will prevent the advertising of food and soft drinks that are high in fat, salt or sugar, HFSS, being targeted at children under 16. The rules apply across all non-broadcast media including on-line and social media. CAP have also amended existing content rules – these prohibit the use of promotions and licensed characters or celebrities in ads targeted through their content at under-12s – to allow non-HFSS advertising more freedom. The changes bring the CAP Code into line with the rules that have governed TV advertising since 2007.²⁹⁰

²⁸⁴ <https://www.gov.uk/government/publications/nutritional-and-health-claims-legislation-bulletins-2015>

²⁸⁵ For further information see Walker, M. J. (2017), Health and nutrition claims – guidance, regulation and self-regulation. *Nutrition Bulletin*, 42, 69–79

²⁸⁶ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2017.063.01.0007.02.ENG&toc=OJ:C:2017:063:TOC

²⁸⁷ <http://curia.europa.eu/juris/document/document.jsf?docid=174170&doclang=en>

²⁸⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62015CO0637>

²⁸⁹ <http://www.foodcomplianceinternational.com/blog/2017/2/15/new-belgian-belfrit-decree-on-botanicals-applicable>

²⁹⁰ <https://www.cap.org.uk/News-reports/Media-Centre/2016/Insight-New-rules-ban-advertising-of-HFSS-food-and-drink-products-in-childrens-media.aspx#.WJr3eFJvhFo>

4.2 Food for infants and young children, medical purposes and weight control

Regulation (EU) No 609/2013, which came fully into effect from 20 July 2016, lays down general compositional and information requirements for the above categories of food, including infant formula and follow-on formula. The Commission adopted specific compositional and information requirements for infant formula and follow-on formula, taking into account the provisions of Directive 2006/141/EC. Infant formula is the only processed foodstuff which wholly satisfies the nutritional requirements of infants during the first months of life until the introduction of appropriate complementary feeding. In order to safeguard the health of those infants, it is necessary to ensure that infant formula is the only product marketed as suitable for such use during that period. The essential composition of infant formula and follow-on formula must satisfy the nutritional requirements of infants in good health as established by generally accepted scientific data. Infant formula and follow-on formula are sophisticated products that are specially formulated for a vulnerable group of consumers. In order to ensure the safety and suitability of such products, detailed requirements are laid down on the composition of infant formula and follow-on formula, including requirements on energy value, macronutrient and micronutrient content. These requirements are based on an EFSA opinion on the essential composition of infant and follow-on formulae. Commission Delegated Regulation 2016/127²⁹¹ supplements Regulation 609/2013 as regards the specific compositional and information requirements for infant formula and follow-on formula and as regards requirements on information relating to infant and young child feeding. Commission Delegated Regulation 2016/128²⁹² supplements Regulation No 609/2013 as regards the specific compositional and information requirements for food for special medical purposes.

Domestic legislation to implement Regulation 609/2013 began in June 2016 with the Foods for Specific Groups (Scotland) Regulations 2016,190 coming into force on 20 July 2016.²⁹³ The Scottish instrument provides for enforcement by Scottish local authorities, offences and penalties and appropriate modification of certain provisions of the Food Safety Act 1990, amendment of the Foods Intended for Use in Energy Restricted Diets for Weight Reduction Regulations 1997 and revocation of subordinate legislation.

Domestic implementation of Regulation 609/2013 continued in July 2016 with the Food for Specific Groups (Information and Compositional Requirements) in England (and see below), Wales and Northern Ireland introducing an improvement notice, IN, enforcement regime in which failure to comply with an IN is a criminal offence. In the English²⁹⁴ and Welsh²⁹⁵ statutory instruments the IN regime sits alongside existing domestic criminal sanctions in the Foods Intended for Use in Energy Restricted Diets for Weight Reduction Regulations 1997, the Medical Food (England) Regulations 2000, the Medical Food (Wales) Regulations 2000, the Processed Cereal-based Foods and Baby Foods for Infants and Young Children (England) Regulations 2003, the Processed Cereal-based Foods and Baby Foods for Infants and Young Children (Wales) Regulations 2004, the Infant Formula and Follow-on Formula (England) Regulations 2007, and their Welsh equivalent, the Food for Particular Nutritional Uses (Addition of Substances for Specific Nutritional Purposes) (England) Regulations 2009 and their Welsh equivalent.

²⁹¹ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.025.01.0001.01.ENG&toc=OJ:L:2016:025:TOC

²⁹² http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.025.01.0030.01.ENG&toc=OJ:L:2016:025:TOC

²⁹³ <http://www.legislation.gov.uk/ssi/2016/190/contents/made>

²⁹⁴ The Food for Specific Groups (Information and Compositional Requirements) (England) Regulations 2016
http://www.legislation.gov.uk/uksi/2016/688/pdfs/uksi_20160688_en.pdf

²⁹⁵ The Food for Specific Groups (Information and Compositional Requirements) (Wales) Regulations 2016
<http://www.assembly.wales/laid%20documents/sub-ld10709/sub-ld10709-e.pdf>

In Northern Ireland²⁹⁶ enforcement at first instance is also by IN however the Notification of Marketing of Food for Particular Nutritional Uses Regulations (Northern Ireland) 2007 (S.R. 2007 No. 60), are revoked as are the Food for Particular Nutritional Uses (Miscellaneous Amendments) Regulations (Northern Ireland) 2010 (S.R. 2010 No. 33), and regulations 26 and 27 of the Infant Formula and Follow on Formula Regulations (Northern Ireland) 2007 (S.R. 2007 No. 506).

The Food for Specific Groups (Information and Compositional Requirements) (England) (Amendment) Regulations 2017 No.62, coming into force on 1 March 2017, corrected errors in SI 2016/688, and correctly applied a modified s.35 (Punishment of offences) of the Food Safety Act 1990.²⁹⁷

4.3 Sugar

Sugar continues to be a topic of keen current interest. In October 2015 Public Health England, PHE, published²⁹⁸ a review of a broad range of measures to reduce the nation's excessive sugar consumption.

The Health (Miscellaneous Provision) Act (Northern Ireland) 2016: Chapter 26,²⁹⁹ achieved Royal assent on 12 May 2016. This Act is to regulate the sale or use of nicotine products and tobacco, and to make other miscellaneous provisions but also includes provision in relation to sugar sweetened drinks. It requires the NI Department of Health, Social Services and Public Safety to carry out a study on a levy on sugar sweetened drinks within two years to determine:

- (a) a definition of sugar sweetened drinks;
- (b) which sugar sweetened drinks should be subject to a levy;
- (c) factors to be considered in determining and administering a levy;
- (d) the financial rate at which a levy may be set;
- (e) the anticipated health and economic impacts of the levy; and
- (f) the options for funding measures to address adverse health conditions associated with the consumption of sugary drinks derived from the levy revenue.

On 30 March 2017 PHE published new guidelines for the food industry demonstrating how it may be possible to remove 20% of the sugar in nine categories of food which contribute the most to children's intakes.³⁰⁰

PHE has engaged with all sectors of the food industry to reduce the amount of sugar in the foods that contribute most to children's intakes by 20% by 2020, with a 5% reduction in the first year.³⁰¹ Industry response was positive.³⁰²

The government announced in the 2017 budget a proposal to introduce a soft drinks industry levy in April 2018. The new tax will be applied to soft drinks which contain added sugar, and have a total sugar content above certain thresholds. The government is introducing the levy in an effort

²⁹⁶ The Food Safety (Information and Compositional Requirements) Regulations (Northern Ireland) 2016 <http://www.legislation.gov.uk/nisr/2016/251/made>

²⁹⁷ <http://www.legislation.gov.uk/uksi/2017/62/contents/made>

²⁹⁸ <https://www.gov.uk/government/news/new-evidence-review-of-measures-to-reduce-sugar-consumption>

²⁹⁹ http://www.legislation.gov.uk/niu/2016/26/pdfs/niu_20160026_en.pdf

³⁰⁰ <https://publichealthmatters.blog.gov.uk/2017/03/30/expert-interview-new-guidelines-for-industry-on-the-sugar-reduction-programme/>

³⁰¹ <https://www.gov.uk/government/collections/sugar-reduction>

³⁰² <https://www.fdf.org.uk/news.aspx?article=7778&newsindexpage=3>

to tackle obesity by reducing the consumption of drinks with added sugar, and to encourage manufacturers to reduce the sugar content of their products.^{303, 304}

4.4 Food supplements

A useful summary by the Department of Health on legislation relating to the sale of food supplements is available.³⁰⁵

In a case referred from France the European Court (First Chamber) gave a ruling on 27 April 2017 that appears to block Member States from setting national legislation on vitamins and minerals in food supplements. The referring court, Tribunal de grande instance de Perpignan, asked three questions in relation to Directive 2002/46/EC and Community principles of free movement of goods and mutual recognition.³⁰⁶ Do the above measures (1) prevent national legislation precluding mutual recognition of products lawfully marketed in another Member State where their nutrient content exceeds limits set in the national legislation, and allow (2) national legislation to set nutrient limits based on (3) national scientific opinions that derive multiples of recommended daily allowances? The Court decided³⁰⁷ that Member States cannot enact national legislation based on national scientific opinions to prohibit, by limits on nutrients, sale of food supplements lawfully manufactured or marketed in another Member State. Any upper safe nutrient levels must be established by a comprehensive scientific assessment of the risks for public health, based not on general or hypothetical considerations, but on relevant scientific data. It is for the referring court to assess whether the method for the setting of those amounts at issue in the main proceedings complies with those requirements.

4.5 Drug and alcohol addiction, and obesity: effects on employment

In December 2016 an independent review by Dame Carol Black explored the challenges faced by individuals who are addicted to alcohol or drugs, or are obese, when they seek to enter, return to and/or remain in work. These three health conditions impose great costs, on individuals and on society, and they bring with them significant labour market disadvantages for those affected. The problems of drug and alcohol dependence have some common features. Obesity is different and far more common; the labour market consequences are more indirect.³⁰⁸

5 Regulation

A fundamental review of the basis of food and feed regulation is beyond the scope of this report however significant measures include the Food Safety Act 1990,³⁰⁹ the Food Standards Act 1999³¹⁰ and the Official Feed and Food Controls (England) Regulations 2009 last amended, in

³⁰³ <https://www.gov.uk/government/publications/soft-drinks-industry-levy/soft-drinks-industry-levy>
³⁰⁴ http://www.britishsoftdrinks.com/write/MediaUploads/Publications/The_Economic_Impact_of_the_Soft_Drinks_Levy.pdf
³⁰⁵ <https://www.gov.uk/government/publications/food-supplements-guidance-and-faqs> .
³⁰⁶ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2016.090.01.0008.01.ENG&toc=OJ:C:2016:090:TOC
³⁰⁷ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2017.202.01.0005.01.ENG&toc=OJ:C:2017:202:TOC
³⁰⁸ <https://www.gov.uk/government/publications/drug-and-alcohol-addiction-and-obesity-effects-on-employment-outcomes>
³⁰⁹ <http://www.legislation.gov.uk/ukpga/1990/16/contents> and see also
[The Food Safety Act 1990 \(Consequential Modifications\) \(Scotland\) Order 1990](#)
[The Food Safety Act 1990 \(Consequential Modifications\) \(No 2\) \(Great Britain\) Order 1990](#)
[The Food Safety Act 1990 \(Consequential Modifications\) \(England and Wales\) Order 1990](#)
[The Food Safety Act 1990 \(Commencement No. 1\) Order 1990](#)
[The Food Safety Act 1990 \(Commencement No. 2\) Order 1990](#)
[The Food Safety Act 1990 \(Commencement No. 2\) Order 1990](#)
³¹⁰ <http://www.legislation.gov.uk/ukpga/1999/28/contents>

England, by the Animal Feed (Hygiene, Sampling etc. and Enforcement) (England) Regulations 2015 that came into force on 6 April 2015, see Sections 5.4 and 6.1. European measures include Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law ... (etc),³¹¹ and Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls ... (etc).³¹²

The Modernisation of European food and feed law with the replacement of Regulation (EC) No 882/2004 *on official controls* by Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017 *on official controls and other official activities* is covered extensively in Section 1.4 above.

Background documents previously reported include:

- Position (EU) No 1/2017 of the Council at First Reading³¹³ ... and
- Statement of the Council's reasons³¹⁴ ...:
with a view to the adoption of a Regulation of the European Parliament and of the Council on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products ...,

The second document is relatively short, explains some of the recent history of the process and suggests that the European Commission, Parliament and Council of Ministers have reached political agreement on a compromise text for a new all-encompassing Regulation on food controls. Further detail and a Q & A from the Commission is available.^{315, 316}

5.1 International Developments

In the USA the FDA Food Safety Modernization Act (FSMA), the most sweeping reform of US food safety laws in more than 70 years, was signed into law by President Obama on 4 January 2011. In brief it aims to ensure the US food supply is safe by shifting the focus from responding to contamination to preventing it. The full text and guidance are available on the FDA website.³¹⁷

A useful review of food safety policy and regulation in the United States is available (dated 2015) from the European Commission.³¹⁸

In Canada consultations continue on the proposed Safe Food for Canadians Regulations (SFCR) introduce modern food safety requirements for businesses that import food, or prepare food to be exported or sold across Canadian provinces.³¹⁹

³¹¹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1488723013503&uri=CELEX:02002R0178-20140630>

³¹² <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1488722763430&uri=CELEX:02004R0882-20170216>

³¹³ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2017.055.01.0001.01.ENG&toc=OJ:C:2017:055:TOC

³¹⁴ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2017.055.01.0143.01.ENG&toc=OJ:C:2017:055:TOC

³¹⁵ [http://europa.eu/rapid/press-release MEMO-17-611_en.htm](http://europa.eu/rapid/press-release_MEMO-17-611_en.htm)

³¹⁶ https://ec.europa.eu/food/safety/official_controls/review_en

³¹⁷ <https://www.fda.gov/Food/GuidanceRegulation/FSMA/>

³¹⁸ Directorate General For Internal Policies Policy Department A: Economic And Scientific Policy Food Safety Policy and Regulation In the United States,

[http://www.europarl.europa.eu/RegData/etudes/STUD/2015/536324/IPOL_STU\(2015\)536324_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2015/536324/IPOL_STU(2015)536324_EN.pdf)

³¹⁹ <http://www.inspection.gc.ca/about-the-cfia/acts-and-regulations/regulatory-initiatives/sfca/consultation/eng/1426531180176/1426531265317>

Pursuant to 2017/C 205/08³²⁰ on networking of organisations operating in fields within EFSA responsibilities an updated list of competent organisations is available³²¹ and includes, for the UK, Public Analyst laboratories, LGC, Fera, PHE and academic institutions.

5.2 Community Reference Laboratories

See Section 6.2, 'Feed Additives'.

5.3 Expert Scientific Committees

Following the March 2016 FSA triennial review of six FSA Scientific Advisory Committees³²² the General Advisory Committee on Science (GACS) was replaced by the FSA Science Council chaired by Professor Sandy Thomas. The Science Council provides high-level, expert strategic insight, challenge and advice to the FSA's Chief Scientific Adviser and to the Board and executive of the FSA on the FSA's use of science to deliver FSA objectives. Its purpose is to help to ensure that the FSA identifies, sources, integrates and uses the best scientific evidence and expertise from all relevant disciplines to inform and evaluate its work. FSA defines science in a broad and inclusive way, including the natural, physical, social and economic, digital and data sciences.³²³

Other expert committees advising government on food and feed matters include:

- The Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment (COT)³²⁴
- The Advisory Committee on the Microbiological Safety of Food (ACMSF)³²⁵
- The Advisory Committee on Animal Feedingstuffs (ACAF)³²⁶
- The Advisory Committee on Novel Foods and Processes (ACNFP),³²⁷ and
- The Social Science Research Committee (SSRC).³²⁸

The triennial review also recommended that the FSA should consult on moving the functions of the ACNFP and ACAF into a new committee, with a wider remit on innovation in the food chain. This was to be established by December 2017 but has not developed further to our knowledge. The review reinforced the importance of ensuring that the advisory committees continue to operate to the established high standards of independence, openness and transparency, including holding open meetings and publishing papers, minutes and reports, and having access to FSA officials and the Board.

5.4 Food Law Code of Practice

The Food Law statutory Codes of Practice for England and Wales and separately for Scotland and Northern Ireland are available on the FSA website.³²⁹ Food Law Practice Guidance that It is non statutory, complements the Code of Practice, and provides general advice on approach to

³²⁰ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2017.205.01.0057.01.ENG&toc=OJ:C:2017:205:TOC

³²¹ <http://www.efsa.europa.eu/sites/default/files/assets/art36listg.pdf>

³²² <https://www.food.gov.uk/news-updates/news/2016/15022/triennial-review-of-six-fsa-scientific-advisory-committees>

³²³ <https://science-council.food.gov.uk/>

³²⁴ <https://cot.food.gov.uk/>

³²⁵ <https://acmsf.food.gov.uk/>

³²⁶ <https://www.food.gov.uk/committee/acaf>

³²⁷ <https://acnfp.food.gov.uk/>

³²⁸ <https://ssrc.food.gov.uk/>

³²⁹ <https://www.food.gov.uk/enforcement/codes-of-practice/food-law-code-of-practice-2015>

enforcement of the law where its intention might be unclear.³³⁰ The Scottish Food and Feed Law Guide was published in December 2016.³³¹

A revised Food Law Code of Practice for England was issued on 30 March 2017.³³²

5.5 Food law prosecutions database

In November 2015 the FSA announced³³³ the publication of a food law prosecutions database. The database³³⁴ gives details of local authority food hygiene and food safety prosecutions outlining where and how food businesses have breached regulations. This data is supplied on a voluntary basis by local authority officers.

5.6 Food law enforcement

On 21 November 2016 the FSA published official statistics on food law enforcement by local authorities across the UK for the year 2015/16. The figures are said to show an increase in a number of areas of local authority enforcement activity, and levels of hygiene compliance in food business, in spite of reported staffing reductions.³³⁵

5.7 Food Standards Scotland

The Food (Scotland) Act 2015³³⁶ established Food Standards Scotland (FSS) and describes the structure and function of this new food body in Scotland which came into operation on 1 April 2015. See also Section 5.4, the Scottish Food and Feed Law Guide.

5.8 Import controls (contaminants, pesticides etc)

Commission Regulation (EC) No 669/2009 lays down rules concerning increased levels of official controls on imports of feed and food of non-animal origin when warranted by evidence of increasing threats to the food chain. The regulation is therefore periodically updated as new threats emerge or others are brought under control.

Thus Commission Implementing Regulation (EU) 2017/1142 of 27 June 2017 amended Annex I to Regulation (EC) No 669/2009. Several previous entries have been deleted, or the frequency of official controls reduced. There were newly increased levels of official controls for ochratoxin A (in dried grapes from Turkey and Iran), for aflatoxins in peppers (*Capsicum* spp.) from Sri Lanka, and in groundnuts (peanuts) and derived products from Senegal, and for salmonella in sesamum seeds from Nigeria and Sudan. The frequency of existing official controls on sulphites in dried apricots from Turkey was increased. Regulation (EU) 2017/1142 contains the current full list.³³⁷

Commission Implementing Regulation (EU) 2016/874 of 1 June 2016 amended Implementing Regulation (EU) 2015/943 on emergency measures suspending imports of dried beans from

³³⁰ <https://www.food.gov.uk/sites/default/files/Food%20Law%20Practice%20Guidance%20October%202015%20-%20FINAL%20.pdf>

³³¹ <http://www.foodstandards.gov.scot/scottish-food-and-feed-law-guide>

³³² <https://www.food.gov.uk/enforcement/codes-of-practice/food-law-code-of-practice>

³³³ <http://www.food.gov.uk/news-updates/news/2015/14644/food-standards-agency-publishes-food-law-prosecutions-database>

³³⁴ <http://www.food.gov.uk/enforcement/prosecutions>

³³⁵ <https://www.food.gov.uk/news-updates/news/2016/15747/fsa-publishes-local-authority-food-law-enforcement-information>

³³⁶ http://www.legislation.gov.uk/asp/2015/1/pdfs/asp_20150001_en.pdf

³³⁷ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.165.01.0029.01.ENG&toc=OJ:L:2017:165:TOC

Nigeria owing to residues of the pesticide dichlorvos. Concentrations exceeding the acute reference dose tentatively established by EFSA were found and the prohibition which was to be extended to 30 June 2019.³³⁸ The corresponding entry in Regulation 669/2009 was deleted as unnecessary.

Implementing Regulation (EU) No 884/2014³³⁹ remains in force and imposes special conditions on the import of certain feed and food from certain third countries due to contamination risk by aflatoxins and was last amended by Regulation (EU) 2016/2106 that requires health certificates to accompany imports of spices from Ethiopia, groundnuts from Argentina, hazelnuts from Azerbaijan, dried figs and hazelnuts from Turkey and groundnuts from India.³⁴⁰

5.9 Local authority enforcement activity

No centrally published new updates were published in the quarter. We remain open to including in this review any updates communicated by individual local authorities to the author. However see Section 5.5 for the food law prosecutions database which is based on local authority activity.

5.10 Multi-Annual National Control Plan

The FSA published on 9 December 2016 its annual report on progress towards implementation of the UK Multi-Annual National Control Plan which was extended in 2016 to the end of March 2018.³⁴¹ The report informs the European Commission on progress in achieving the objectives of the plan, summarises the results of official controls and associated activities carried out by the competent authorities and associated bodies, and outlines the findings of performance audits.³⁴²

5.11 National sampling priorities for food surveillance

The FSA has been working with UK local authorities since 2003 to support Enforcement Authority risk-based sampling and surveillance of food sold in the UK, whether it is imported or produced in the EU or UK.³⁴³ The FSA invited³⁴⁴ recommendations for priorities for the 2016-17 National Coordinated Sampling Programme which were published in September 2016.³⁴⁵ On 29 November 2016 the FSA held a 'Food Surveillance Summit' as part of the development phase for a new food surveillance approach.³⁴⁶ We are unaware of any new developments.

5.12 Regulators' development needs analysis, RDNA

The food section of the RDNA self-assessment tool has been updated to include the competency statements for authorised officers and lead food officers in the Food Law Code of Practice 2015.³⁴⁷ RDNA appears to be a useful mechanism of clarifying regulatory need and seems to be

³³⁸ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.145.01.0018.01.ENG&toc=OJ:L:2016:145:TOC

³³⁹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1499096567716&uri=CELEX:02014R0884-20161222>

³⁴⁰ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.327.01.0044.01.ENG&toc=OJ:L:2016:327:TOC

³⁴¹ <https://www.food.gov.uk/enforcement/regulation/europeleg/feedandfood/hcpuk>

³⁴² <https://www.food.gov.uk/news-updates/news/2016/15807/2015-annual-report-on-uk-multi-annual-national-control-plan-published>

³⁴³ <https://www.food.gov.uk/enforcement/sampling/samplingandsurveillance>

³⁴⁴ <https://www.food.gov.uk/news-updates/help-shape-our-policies/priorities-for-the-2016-17-national-coordinated-sampling-programme>

³⁴⁵ <https://www.food.gov.uk/sites/default/files/food-sampling-guidance-2016-17.pdf>

³⁴⁶ <https://www.food.gov.uk/news-updates/news/2016/15753/food-surveillance-summit-get-involved>

³⁴⁷ https://www.gov.uk/government/news/fresh-food?mc_cid=127fb196ca&mc_eid=f1b5809dbc

open to all stakeholders.³⁴⁸ There are links to the Guidance for Regulators Information Point (GRIP) portal that intended to help authorised officers and lead food officers in England meet their development needs both during and after their competency assessment processes.³⁴⁹

5.13 Standards in Public Life

The Committee on Standards in Public Life presented in September 2016 a report on how regulatory bodies in the United Kingdom uphold the Seven Principles of Public Life. The Committee was struck by the complexity and disparity of the regulatory landscape with a shared need to maintain integrity through independence – both from government and those they regulate – avoiding undue influence and ensuring the decisions they make are fair, well-reasoned and evidence-based. In light of the result of the June 2016 referendum in which the British people voted to leave the European Union (EU), the UK’s regulatory landscape is likely to be substantially restructured in the coming years. The Committee made recommendations on Governance, Codes of Conduct, staff ‘revolving door’ issues, independence, transparency and external leadership.³⁵⁰

5.14 Official Food Chain Requirements and Methods of Analysis

Official methods or performance characteristics thereof are mentioned elsewhere in this report (e.g. 2.2.1 for contaminants and 2.7 for marine biotoxins) and proliferate throughout food law. This subsection is not intended to be comprehensive but will collate overarching food analytical methods as they arise. A source of food chain requirements and several diverse methods is Commission Regulation (EC) No 2074/2005³⁵¹ of 5 December 2005 laying down implementing measures for certain products under Regulation (EC) No 853/2004 (hygiene rules for food of animal origin), (EC) No 854/2004 (official controls on products of animal origin intended for human consumption) and Regulation (EC) No 882/2004 (Official Controls). The requirements of Regulation 2074/2005 include methods and limit values for total volatile basic nitrogen (TVB-N) in fish, methods for marine biotoxins, and for raw milk and heat-treated milk, the applicable official controls for the inspection of meat, provisions on water retention agents in poultry and the calcium content of mechanically separated meat.

6 Feeding stuffs and fertilisers

6.1 Feeding stuffs

The Animal Feed (Hygiene, Sampling etc. and Enforcement) (England) Regulations 2015 came into force on 6 April 2015. The Feed (Hygiene and Enforcement) (England) Regulations 2005, the Feed (Specified Undesirable Substances) (England) Regulations 2006, the Feed (Hygiene and Enforcement) and the Animal Feed (England) (Amendment) Regulations 2013 were revoked. Also revoked were Regulation 51 and Schedule 7 of the Official Feed and Food Controls (England) Regulations 2009 and Regulations 4, 5, 6, 7, 21, 22, and 23 and Schedule 1 of the

³⁴⁸ <http://rdna-tool.bis.gov.uk/>

³⁴⁹ <http://www.regulatorsdevelopment.info/grip/food>

³⁵⁰ CM 9327, Striking the balance, upholding the seven principles of public life in regulation:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/554817/Striking_the_Balance_web_-_v3_220916.pdf

³⁵¹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1494594527755&uri=CELEX:02005R2074-20160603>

Feed (Sampling and Analysis and Specified Undesirable Substances) (England) Regulations 2010.

Thus the 2015 regulations make provisions for the appointment and qualifications of Agricultural Analysts, sampling for analysis, secondary analysis by the Government Chemist, and the form and evidential status of an Agricultural Analyst's certificate of analysis. Also dealt with are methods of analysis where the sampling has not been carried out in the course of official controls and making it an offence to tamper or otherwise interfere with a sample.

The 2015 regulations provide for the continuing execution and enforcement of Regulation (EC) No 183/2005 laying down requirements for feed hygiene and Commission Regulation (EC) No. 152/2009 laying down the methods of sampling and analysis for the official control of feed, and also make provision as to administration generally in relation to feed law, in particular so as to give effect to Regulation (EC) No 882/2004 on official controls. Part 2 of the 2015 Regulations deals with the execution and enforcement of Regulation 183/2005, which provides that almost all businesses producing, trading in or using animal feed should be either registered, or approved, by the competent authorities.

The Animal Feed (Composition, Marketing and Use) (England) Regulations 2015³⁵² (SI 255) amended the Official Feed and Food Controls (England) Regulations 2009 (SI 3255) and revoked the Genetically Modified Animal Feed (England) Regulations 2004 (SI 2334), the Feed (Corn Gluten Feed and Brewers Grains) (Emergency Control) (England) (Revocation) Regulations 2007 (SI 3007) and the Animal Feed (England) Regulations 2010 (SI 2503), other than regulations 1, 2 and 14. These Regulations give effect to:

- Commission Directive 82/475/EEC laying down the categories of feed materials which may be used for the purposes of labelling compound feeding stuffs for pet animals;
- Directive 2002/32/EC of the European Parliament and of the Council on undesirable substances in animal feed;
- Regulation (EC) No 1829/2003 of the European Parliament and of the Council on genetically modified food and feed;
- Regulation (EC) No. 1831/2003 of the European Parliament and of the Council on additives for use in animal nutrition;
- Commission Directive 2008/38/EC establishing a list of intended uses of animal feeding stuffs for particular nutritional purposes; and
- Regulation (EC) No. 767/2009 of the European Parliament and of the Council on the placing on the market and use of feed, amending European Parliament and Council Regulation (EC) No 1831/2003 and repealing certain other measures.

Similar regulations were made in Northern Ireland to make provision as to administration generally in relation to feed law, in particular so as to give effect to Regulation (EC) No. 882/2004. These were the Animal Feed (Composition, Marketing and Use) (Northern Ireland) Regulations 2016³⁵³ (SR 4) amending:

- The Official Feed and Food Controls (Northern Ireland) Regulations 2009 (SR 427) and The Animal Feed (Hygiene, Sampling etc. and Enforcement) Regulations (Northern Ireland) 2016³⁵⁴ (SR 5) which supersede:
 - The Feed (Hygiene and Enforcement) Regulations (Northern Ireland) 2005 (SR.546);

³⁵² http://www.legislation.gov.uk/uksi/2015/255/pdfs/uksi_20150255_en.pdf

³⁵³ http://www.legislation.gov.uk/nisr/2016/4/pdfs/nisr_20160004_en.pdf

³⁵⁴ http://www.legislation.gov.uk/nisr/2016/5/pdfs/nisr_20160005_en.pdf

- The Feed (Specified Undesirable Substances) Regulations (Northern Ireland) 2006 (SR 471);
- Regulation 46 and Schedule 7 of the Official Feed and Food Controls Regulations (Northern Ireland) 2009 (SR 427);
- Regulations 4, 5, 6, 20, 21, and 22 and Schedule 1 of the Feed (Sampling and Analysis and Specified Undesirable Substances) Regulations (Northern Ireland) 2010 (SR 323);
- The Feed (Hygiene and Enforcement) and the Animal Feed (Amendment) Regulations (Northern Ireland) 2013 (SR 294).

6.1.1 Mycotoxin recommended limits

Commission Recommendation (EU) 2016/1319³⁵⁵ of 29 July 2016 amended Recommendation 2006/576/EC as regards deoxynivalenol, zearalenone and ochratoxin A in pet food. Commission Recommendation 2006/576/EC establishes guidance values for deoxynivalenol, zearalenone, ochratoxin A, fumonisins B1+B2 and T-2 and HT-2 toxin in feed materials and compound feed. The current guideline level for deoxynivalenol in feed for dogs of 5 mg kg⁻¹ (from recent evidence including from EFSA) appears too high and is reduced to 2 mg kg⁻¹. Guideline levels for zearalenone and ochratoxin A in feed for cats and dogs are established at 0.2 mg kg⁻¹ and 0.01 mg kg⁻¹ respectively.

6.1.2 Dioxin testing

Regulation (EC) No 183/2005 of the European Parliament and of the Council lays down general rules on feed hygiene and processing conditions, the latest consolidated version³⁵⁶ is that of 23 April 2016 and includes updates in previous editions of this legislation review.

Commission Regulation (EU) 2017/771 of 3 May 2017³⁵⁷ amended Regulation (EC) No 152/2009 (see section 6.1) as regards the methods for the determination of the levels of dioxins and polychlorinated biphenyls. Regulation 152/2009 includes methods for the determination of polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs), dioxin-like polychlorinated biphenyls (PCBs) and non-dioxin-like PCBs in feed. On evidence from the EU reference laboratory for dioxins and PCBs in feed and food that analytical results for dioxins and PCBs in certain cases are not reliable when the performance criteria provided for in Part B of Annex V to Regulation (EC) No 152/2009 are not applied by laboratories performing the analysis of samples taken by feed business operators in accordance with Regulation (EC) No 183/2005, the application of the performance criteria for the analysis of such samples was made obligatory. Regulation 2017/771 deletes the decision limit in Commission Decision 2002/657/EC for the analysis of dioxins, furans and PCBs in feed in favour of the expanded uncertainty using a coverage factor of 2, giving a level of confidence of approximately 95 % and references guidance documents for the measurement uncertainty and for the estimation of the Limit of Detection (LOD) and Limit of Quantification (LOQ).³⁵⁸ Reporting requirements for physico-chemical methods used for screening are aligned with similar reporting requirements for bioanalytical screening methods and performance criteria are simplified and aligned generally. Along with some amended technical specifications, such as recoveries of isotope-labelled standards and other minor modifications, the whole Part B of Annex V to Regulation (EC) No 152/2009 is replaced.

³⁵⁵ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1474057348374&uri=CELEX:32016H1319>

³⁵⁶ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1498138333211&uri=CELEX:02005R0183-20160423>

³⁵⁷ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.115.01.0022.01.ENG&toc=OJ.L:2017:115:TOC

³⁵⁸ http://ec.europa.eu/food/safety/animal-feed_en

6.1.3 Nickel in feed

EFSA requires further data on Ni in food of animal origin and accordingly Commission Recommendation (EU) 2016/1110 of 28 June 2016 asks Member States to monitor for the presence of nickel in feed.³⁵⁹

6.1.4 Starch content – analytical methods differ

Commission Implementing Regulation (EU) 2017/68 of 9 January 2017 amended Regulation (EC) No 121/2008 laying down the method of analysis for the determination of starch content in preparations of a kind used in animal feeding (CN code 2309). The classification of preparations of a kind used in animal feeding under the subheadings of heading 2309 of the Combined Nomenclature annexed to Council Regulation (EEC) No 2658/87 is determined on the basis of the product's starch content. For the purposes of that classification, Commission Regulation (EC) No 121/2008 (3) provides for use of an enzymatic analytical method for the determination of starch content in certain preparations. Where soya products are present in those preparations, their content of starch can be ascertained using the polarimetric method or the enzymatic analytical method. It has been found that substantially different results are obtained depending on the method used, and the polarimetric method has been found not to be suitable for determining the starch content of the preparations with soya products as it gives inaccurate results. Soya products are therefore added to the list of feed materials set out in Article 1 of Regulation (EC) No 121/2008 in respect of which the starch content of the preparation is to be determined using the enzymatic analytical method in order to clarify which method the customs authorities are to use and thus ensure a uniform classification in the Member States.³⁶⁰

6.2 Feed additives

Regulation (EC) No 1831/2003 provides for the authorisation of additives for use in animal nutrition and for the grounds and procedures for granting such authorisation. A register of feed additives is available.³⁶¹ Guidance is available intended to help applicants in their preparation of technical dossiers for applications for authorisation.³⁶²

The Animal Feed (Scotland) Amendment Regulations 2017 No. 38,³⁶³ in force 23 March 2017, provide for the execution and enforcement of Commission Regulation (EU) 2015/327 amending Regulation (EC) No 1831/2003 of the European Parliament and of the Council as regards requirements for the placing on the market and conditions of use of additives consisting of preparations. These Regulations amend the Animal Feed (Scotland) Regulations 2010.

Commission Implementing Regulation (EU) 2017/1145 of 8 June 2017, pursuant to Article 10(5) of Regulation (EC) No 1831/2003, lists the repeal of obsolete provisions authorising feed additives which were entered in the Community Register of Feed Additives as existing products and for which no applications in accordance with Article 10(2) and (7) of Regulation (EC) No 1831/2003 were submitted before the deadline provided for in those provisions, or for which an application was submitted but subsequently withdrawn. The Annex to Regulation (EU) 2017/1145 lists over 200 such additives.³⁶⁴

³⁵⁹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1471533458929&uri=CELEX:32016H1110>

³⁶⁰ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.009.01.0004.01.ENG&toc=OJ:L:2017:009:TOC

³⁶¹ http://ec.europa.eu/food/safety/animal-feed/feed-additives/eu-register/index_en.htm

³⁶² <http://www.efsa.europa.eu/en/efsajournal/pub/4473>

³⁶³ <http://www.legislation.gov.uk/ssi/2017/38/contents/made>

³⁶⁴ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.166.01.0001.01.ENG&toc=OJ:L:2017:166:TOC

6.2.1 Community and National Reference Laboratories

Regulation (EC) No 1831/2003 deals with application for, and authorisation of, feed additives in animal nutrition with detailed rules in Regulation (EC) No 1831/2003 including the duties and tasks of the Community Reference Laboratory (CRL). In October 2015 Commission Implementing Regulation 2015/1761³⁶⁵ amended Regulation 378/2005 as regards the Community Reference Laboratory reports, fees and the feed additive national reference laboratories, including LGC, listed in Annex II thereto.

6.3 Fertilisers

Legislation on fertilisers is highly technical and treated here but briefly. The overarching European measure is Regulation (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003.³⁶⁶ This regulation is updated from time to time, including with references to validated analytical methods, see for example (non-exhaustively) Commission Regulation (EU) 2016/1618.³⁶⁷

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³⁶⁵ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2015.257.01.0030.01.ENG

³⁶⁶ Latest consolidated version (Sept 2016) is at <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1474134170231&uri=CELEX:02003R2003-20160101> however please consult EUR-Lex for the most up to date version <http://eur-lex.europa.eu/homepage.html>

³⁶⁷ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1474057348374&uri=CELEX:32016R1618>