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Survey of Acrylamide and Furan in UK Retail Products: Results for Samples Purchased Between January 2014 and November 2015

A report prepared for the Food Standards Agency

August 2016



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| Report No: | C037 |
|--------------------------------|--|
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| Date: | First draft: August 2016 |
| | Final version: October 2016 |
| Sponsor: | Food Standards Agency, |
| | Aviation House, |
| | 125 Kingsway, |
| | London, WC2B 6N |
| Sponsors Project Title: | Survey of Acrylamide and Furan in UK Retail Products: Summary |
| | Report for Samples Purchased Between January 2014 and November |
| | 2015 |
| Sponsors Project reference No: | FS102075 |
| Distribution: | 1. |
| | 2. |
| | 3. |
| | 4. |

5.

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1. EXECUTIVE SUMMARY

This report refers to work carried out as part of a rolling survey of process contaminants in UK retail foods. The report contains the results for acrylamide and furan levels in food samples purchased between January 2014 and November 2015:

- A total of 526 samples were collected by an independent sampling contractor (Ventress Technical) from a range of retail outlets in seven regions of the UK
- The selection of samples followed a core sampling and analysis plan from a previous acrylamide and furan survey (November 2011- December 2013).
- For the latest survey (2014-2018), all samples were categorised in accordance with the requirements for the submission of data to EFSA^{1,2}.
- Where necessary, foods were cooked or prepared according to the manufacturers' guidelines prior to analysis.
- All analyses were carried out using accredited methods: a total of 518 tests were carried out for acrylamide and 250 for furan.
- For this period, the number of products found to contain acrylamide levels that exceeded European Commission 'Indicative Values' (IV)³ for their food category was 29.

¹ European Food Safety Authority, 2014; Specific requirements for chemical contaminants' data submission. EFSA supporting publication 2014:EN-604. 25 pp.

² EFSA (European Food Safety Authority), 2015. Specific requirements for chemical contaminant and food additive occurrence data submission. EFSA supporting publication 2015:EN-833. 26 pp.

³ Commission Recommendation of 8 November 2013 on investigations into the levels of acrylamide in food (2013/647/EU), oj L 301, 15-17, 12.11.13

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3. INTRODUCTION

Absent in raw food, or the raw materials used to make food, acrylamide and furan are chemical substances produced naturally when some foods are subjected to high temperatures during cooking (including home-cooking) and processing. Regular and prolonged exposure over a lifetime to foods containing high levels of acrylamide and furan has the potential to increase the risk of developing cancer. Experts, including the international Joint Food and Agriculture Organisation and the World Health Organisation Expert Committee on Food Additives (JECFA), have concluded that current global levels of dietary exposure to acrylamide and furan indicate a human health concern⁴. The UK Food Standards Agency (FSA) has concluded that exposure to acrylamide and furan should be as low as reasonably achievable (ALARA). The FSA has produced advice for consumers in relation to acrylamide in food⁵.

3.1 Acrylamide

Acrylamide is a chemical that forms naturally in (mostly) starchy foods during every-day high temperature cooking (as foods lose moisture and temperatures exceed 120°C) such as baking, frying and roasting. It is formed mainly from sugars and the amino acid asparagine, both of which are naturally present in foods. The chemical process that causes this occurs as a minor part of the so called Maillard Reaction; the Maillard Reaction is mainly responsible for the desirable colour and taste of food. Although acrylamide does not occur in foods subjected to lower temperatures and relatively short process times e.g. boiled potatoes, it has been found in a wide range of home-cooked and processed foods, including, bread, coffee, crispbreads, French fries and potato crisps.

There are no statutory maximum acrylamide levels, however the latest European Commission Recommendation⁶ on investigations into the levels of acrylamide in food specifies 'indicative values' (IV) for acrylamide. These IV, which apply to the current 2014-2018 survey period, are not intended as maximum limits but as a trigger to initiate investigations by enforcement authorities into food business operators' understanding of acrylamide and any action they have taken to mitigate its production. Foods that exceed an 'IV' do not trigger enforcement action. Through such investigations it is hoped to gain a better understanding of the practical issues involved. An acrylamide "toolbox" is available to industry to provide guidance on measures to reduce acrylamide levels in various categories of foods. Short extracts of the toolbox have been developed in the form of sector specific brochures and can be found on the Commission website⁷. These brochures are designed to help food business operators to implement those items of the toolbox that are relevant for their sector. The Food

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⁴ Joint FAO/WHO Expert Committee on Food Additives (2010), Summary and conclusions of the Seventy-second meeting, Rome, 16–25 February 2010. Rome, FAO / WHO

⁵ http://www.food.gov.uk/safereating/chemsafe/acrylamide_branch/

⁶ Commission Recommendation of 8 November 2013 on investigations into the levels of acrylamide in food (2013/647/EU), oj L 301, 15-17, 12.11.13

⁷ http://ec.europa.eu/food/food/chemicalsafety/contaminants/acrylamide_en.htm

and Drink Federation (FDF) also has recordings of 'webinars' (online presentations) on the use of the toolbox that may be of interest to food businesses⁸.

3.2 Furan

Furan is formed from the thermal degradation of sugars, oxidation of polyunsaturated fatty acids or the decomposition of ascorbic acid (vitamin C). It is found in a variety of products, including coffee, prefabricated potato snacks and canned and jarred products which, during processing, have been subjected to a high temperature heat treatment (e.g. roasting, frying, canning etc).

Furan is highly volatile; however once formed as a result of the heat treatment, it cannot evaporate from processed food contained in an airtight sealed pack until the container is opened. Residual furan that may be present in the food after first opening the container may also evaporate over time, although the amount of furan lost will be dependent on the conditions of storage.

Furan has been classified by the IARC as a possible human carcinogen. Evidence indicates that the latter may occur via a genotoxic mechanism. In 2007, the European Commission recommended that member states should carry out monitoring for the presence of furan in heated foods⁹.

3.3 EC Recommendations

This survey was conducted in response to two European Commission Recommendations for pan-European activity on process contaminants: (i) European Commission Recommendation (EU) No. 2010/307 to investigate the levels of acrylamide in food, and in particular to monitor the effectiveness of acrylamide reduction measures as specified in the FoodDrinkEurope toolbox and (ii) European Commission Recommendation (EC) No. 2007/196, to monitor the occurrence levels of furan in foodstuffs.

3.4 European Food Safety Authority

As with previous surveys on acrylamide and furan, all data from this survey will be submitted to the European Food Safety Authority (EFSA). EFSA collates the acrylamide results with those from other Member States and, in the case of furan, these data will be used by EFSA as the basis of developing a risk assessment. EFSA publishes the acrylamide exposure assessments and trend analyses on their website¹⁰.

On 4th June 2015, EFSA published its Scientific Opinion on acrylamide in food¹¹. EFSA agreed with the previous evaluations, that acrylamide in food has the potential to increase the risk of developing cancer. EFSA also considered possible harmful effects of acrylamide on the nervous system and male reproduction, and based

⁸ Available at: http://www.fdf.org.uk/acrylamide-webinars.aspx

⁹ Commission recommendation of 28 march 2007 on the monitoring of the presence of furan in foodstuffs. Oj L 88/56 29.3.2007

¹⁰ Available at: http://www.efsa.europa.eu/en/topics/topic/acrylamide.htm

¹¹ EFSA CONTAM Panel 2015, Scientific Opinion on acrylamide in food. EFSA Journal 2015;13(6):4104, 321 pp. Available at: https://www.efsa.europa.eu/en/efsajournal/pub/4104 [Accessed June 2016]

on current levels of dietary exposure, these effects were not considered to be a concern. Further information on acrylamide can be obtained from the EFSA website.

3.5 FSA Surveys

Information and results for all previous surveys can be accessed from the FSA website¹².

The results obtained from this 2014-15 survey form part of a longer term surveillance programme. It is expected that following the current 2014-2018 survey period, further analyses of all data and trends regarding the levels of acrylamide and furan in UK retail foods will be carried out.

4. METHODS

4.1 Sampling

Prior to the commencement of sampling, the FSA agreed a detailed sampling plan with the analytical contractor (Premier Analytical Services) who was responsible for coordinating the purchase and collection of samples (via Ventress Technical) from a wide range of retail outlets including major and smaller supermarkets and independent retailers in the UK.

A total of 526 samples were purchased to cover the 11 Food Categories in line with the requirements of EFSA^{13,14} and the European Commission¹⁵.

Details of the sampling plan are given in Table 4 of the appendices (see section 6).

4.2 SAMPLE PREPARATION AND ANALYSIS

Samples received at the laboratory were prepared and stored according to the Food Standards Agency "Guidelines for undertaking surveys" ¹⁶. Potato products from Food Category 3 and Popcorn from Food Category 10 were cooked according to manufacturers' guidelines prior to the determination of acrylamide; because of the volatile nature of furan, coffee and coffee substitutes were tested for furan before and after preparation for consumption according to manufacturer's guidelines. Further details of the sample preparation procedures used are given in the appendices (see section 6.2 and Table 5 and Table 6).

Analysis of samples for the 2014-15 survey was carried out using UKAS accredited methods: the measurements of acrylamide and furan were based on the guidelines laid down in Commission Recommendations 2007/331/EC and 2007/196/EC. All test results were obtained from methods that used labelled isotope internal standards for recovery correction. Further details of the methods together with the analytical quality assurance procedures and measurement uncertainty can be found in the appendices (see sections 6.2 and 6.3).

¹² Available at: http://www.food.gov.uk/science/research/surveillance/fdsurvey_2013/acrylamide-and-furan-survey/

European Food Safety Authority, 2014; Specific requirements for chemical contaminants' data submission. EFSA supporting publication 2014:EN-604. 25 pp.

¹⁴ EFSA (European Food Safety Authority), 2015. Specific requirements for chemical contaminant and food additive occurrence data submission. EFSA supporting publication 2015:EN-833. 26 pp.

¹⁵ Commission Recommendation of 8 November 2013 on investigations into the levels of acrylamide in food (2013/647/EU), oj L 301, 15-17, 12,11,13

¹⁶ Guidelines for undertaking surveys. Available at: https://www.food.gov.uk/sites/default/files/multimedia/pdfs/fsasurveysguidance.pdf [accessed June 2015]

5. RESULTS SUMMARIES

A total of 526 samples were received over the period January 2014 - November 2015 for the analysis of acrylamide and furan in accordance with the test requirements given in Table 1.

Table 1. Summary of samples received (Jan 2014 - Nov 2015) and tests undertaken

| | | N. 1 C | | Ana | lyses | |
|-----------------------------|------------------------------|-----------|----------|----------|----------|----------|
| Food category | Demonstrations | Number of | acry | lamide | | ıran |
| / sub category ^a | Description | samples | As | As | As | As |
| . · | | received | received | consumed | received | consumed |
| 1 | French fries, sold as ready- | 80 | 80 | _ | _ | _ |
| | to-eat | | | _ | _ | _ |
| 2 | Potato crisps | 55 | 55 | - | - | - |
| 3 | Pre-cooked French | | | | | |
| | fries/potato products for | 59 | - | 59 | - | - |
| | home cooking | | | | | |
| 4 | Bread | 45 | 45 | - | - | - |
| 5 | Breakfast cereals | 48 | 44 | - | 48 | - |
| 6 | Biscuits / crackers | 54 | 54 | - | 54 | - |
| 7 | Coffee and coffee | 40 | 40 | _ | 40 | 40 |
| | substitutes | | 40 | _ | 70 | 70 |
| 8 | Baby foods | 43 | 43 | - | 43 | - |
| 9 | Processed cereal based | | | | | |
| | foods for infants & young | 40 | 40 | - | - | - |
| | children | | | | | |
| 10 | Other products, based on | | | | | |
| | cereals, potatoes, cocoa | - | - | - | - | - |
| | and coffee | | | | | |
| 10.2 | Cake / pastry | 12 | 12 | - | - | - |
| 10.3 | Tortilla/corn snacks | 4 | 4 | - | 2 | - |
| 10.4 | Cereal bars / granola | 4 | 4 | - | 2 | - |
| | Popcorn | 4 | | 4 | - | 4 |
| 10.5 | Baked potato from fast | 2 | 2 | _ | _ | _ |
| | food outlet | | 2 | _ | _ | _ |
| 10.6 | Cocoa/choc powder | 6 | 6 | - | 3 | - |
| | Chocolate (dark) | 2 | 2 | - | - | - |
| 11 | Other products, not based | | | | | |
| | on cereals, potatoes, cocoa | - | - | - | - | - |
| | and coffee | | | | | |
| | Canned black olives | 4 | 4 | - | 2 | - |
| | Canned prunes | 4 | 4 | - | 4 | - |
| | Dried fruit (dark) | 4 | 4 | - | - | - |
| | Jams / preserves | 4 | - | - | 4 | - |
| | Liquorice | 4 | 4 | - | - | - |
| | Vegetable crisps | 8 | 8 | - | 4 | - |
| | Totals | 526 | 455 | 63 | 206 | 44 |
| | _ 5 4415 | | 1 | | | - |

^a according to EFSA^{17,18}

¹⁷ European Food Safety Authority, 2014; Specific requirements for chemical contaminants' data submission. EFSA supporting publication 2014:EN-604. 25 pp.

¹⁸ European Food Safety Authority, 2015; Specific requirements for chemical contaminants' data submission. EFSA supporting publication 2015: 2015:EN-833.

5.1 ACRYLAMIDE

A summary of acrylamide concentrations (mean, range, number of samples and IV) measured in each of the main categories and sub-categories of the 2014-15 survey samples is given in Table 2: 518 tests were carried out for acrylamide and the individual sample results for each category can be found in 6.4 of the Appendices.

Table 2. Summary of acrylamide concentrations in each product category / sub-category

| Food categ | gory / | Demonstrations | Sampling | | | Acryla | amide (| μg/kg) | | 117 |
|------------|--------|---|----------------------------|----|------|--------|---------|-----------|-----------------|------|
| sub catego | rya | Description | dateb | n | mean | min | max | SE | IV ^c | n>IV |
| 1 | | French fries sold as ready to eat | 2014 | 40 | 157 | 12 | 587 | 21 | - | - |
| | | • | 2015 | 40 | 167 | 34 | 472 | 17 | - | - |
| | 1.1 | French fries from fresh potatoes | $Mar-14^b$ | 20 | 186 | 29 | 587 | 37 | 600 | 0 |
| | | | $Mar-15^b$ | 20 | 179 | 34 | 472 | 28 | 600 | 0 |
| | | | <i>Nov-14</i> ^b | 20 | 129 | 12 | 326 | 19 | 600 | 0 |
| | | | <i>Nov-15</i> ^b | 20 | 154 | 41 | 362 | 20 | 600 | 0 |
| 2 | | Potato crisps and potato-based crackers | 2014 | 27 | 779 | 88 | 2542 | 122 | - | - |
| | | | 2015 | 28 | 691 | 151 | 1909 | 79 | - | - |
| | 2.1 | Potato crisp from fresh potatoes | $Mar-14^b$ | 10 | 861 | 329 | 1873 | 157 | 1000 | 4 |
| | | | $Mar-15^b$ | 11 | 896 | 302 | 1909 | 151 | 1000 | 4 |
| | | | <i>Nov-14</i> ^b | 10 | 551 | 126 | 1010 | 83 | 1000 | 1 |
| | | | $Dec-14^b$ | 1 | 673 | - | - | - | 1000 | 0 |
| | | | <i>Nov-15</i> ^b | 11 | 517 | 166 | 517 | 65 | 1000 | 0 |
| | 2.4 | Potato-based crackers | 2014 | 6 | 1039 | 88 | 2542 | 467 | 1000 | 2 |
| | | | 2015 | 6 | 633 | 151 | 1221 | 179 | 1000 | 2 |
| 3 | | Pre-cooked French fries, potato products for home cooking | 2014 | 29 | 256 | 6 | 1156 | 54 | - | - |
| | | - | 2015 | 30 | 214 | 4 | 1345 | 55 | - | - |
| | 3.1 | Fries baked in the oven (oven fries) | <i>Mar-14</i> ^b | 6 | 405 | 103 | 1156 | 157 | - | - |
| | | | $Mar-15^b$ | 6 | 270 | 18 | 946 | 147 | - | - |
| | | | $Nov-14^b$ | 6 | 87 | 13 | 175 | 26 | - | - |
| | | | <i>Nov-15</i> ^b | 6 | 156 | 156 | 489 | 68 | - | - |
| | 3.2 | Deep fried fries | $Mar-14^b$ | 2 | 62 | 19 | 104 | - | - | - |
| | | | $Mar-15^b$ | 2 | 21 | 9 | 32 | - | - | - |
| | | | $Nov-14^b$ | 2 | 11 | 6 | 15 | - | - | - |
| | | | <i>Nov-15</i> ^b | 2 | 20 | 4 | 36 | - | - | - |
| | 3.3 | Unspecified pre-cooked French fries, potato products for home | Mar-14 ^b | 6 | 477 | 92 | 1116 | 143 | - | - |
| | | cooking | , | | | | | | | |
| | | | <i>Mar-15</i> ^b | 7 | 342 | 44 | 1345 | 175 | - | - |
| | | | Nov-14 ^b | 7 | 211 | 23 | 522 | 62 | - | - |
| | | | Nov-15 ^b | 7 | 199 | 10 | 616 | 79 | - | - |
| 4 | | Soft bread | 2014 | 20 | 14 | 4 | 37 | 2 | - | - |
| | | XXI . 1 1 1 | 2015 | 25 | 22 | 4 | 136 | 5 | - | - |
| | 4.1 | Wheat based bread | 2014 | 20 | 14 | 4 | 37 | 2 | 80 | 0 |
| | | | 2015 | 24 | 23 | 4 | 136 | 6 | 80 | 1 |
| | 4.2 | Soft bread other than wheat based bread | 2014 | 0 | - | - | - | - | 150 | 0 |
| | | | 2015 | 1 | 12 | - | - | - | - | - |

Table 2 continued...

| Food category / | Description | Sampling | | | Acryla | nmide (į | μg/kg) | | n> IV |
|---------------------------|---|-------------------|--------|----------------|------------------|------------|----------|-----------------|---------------|
| sub category ^a | Description | date ^b | n | mean | min | max | SE | IV ^c | n>IV |
| 5 | Breakfast cereals (excluding | 2014 | 22 | 174 | 41 | 541 | 26 | _ | - |
| | porridge) | 2015 | 22 | 146 | 21 | 484 | 23 | _ | _ |
| 5.1 | Maize, oat, spelt, barley and rice | 2014 | 4 | 77 | 58 | 94 | 7 | 200 | 0 |
| 5.1 | based products | | | | | | | | |
| | Bran products and whole grain | 2015 | 4 | 90 | 69 | 124 | 12 | 200 | 0 |
| 5.3 | cereals, gun puffed grain | 2014 | 18 | 196 | 41 | 541 | 29 | 400 | 2 |
| | | 2015 | 18 | 158 | 21 | 484 | 27 | 400 | 1 |
| 6 | Biscuits, crackers, crisp bread and similar (excluding pastry and cake) | 2014 | 24 | 347 | 27 | 1324 | 67 | - | - |
| | and cane) | 2015 | 30 | 299 | 26 | 2576 | 89 | - | - |
| 6.1 | Crackers with the exception of potato based crackers | 2014 | 6 | 233 | 90 | 544 | 73 | 500 | 1 |
| | • | 2015 | 6 | 229 | 71 | 583 | 82 | 500 | 1 |
| 6.2 | Crisp bread | 2014 | 3 | 210 | 107 | 327 | 64 | 450 | 0 |
| | | 2015 | 3 | 132 | 40 | 252 | 63 | 450 | 0 |
| 6.3 | Biscuits and wafers | 2014 | 8 | 301 | 30 | 1056 | 114 | 500 | 1 |
| - | | 2015 | 11 | 307 | 33 | 1055 | 96 | 500 | 2 |
| 6.4 | Gingerbread | 2014 | 4 | 803 | 360 | 1324 | 199 | 1000 | 1 |
| | | 2015 | 4 | 120 | 26 | 267 | 53 | 1000 | 0 |
| 6.5 | Products similar to the other products in this category | 2014 | 3 | 227 | 27 | 407 | 110 | 500 | 0 |
| - | C - 66 1 66 1 4 4 - 4 | 2015 | 6 | 557 455 | <i>59</i> | 2576 | 405 | 500 | 1 |
| 7 | Coffee and coffee substitutes | 2014 | 20 | 455 | 7 | 940 | 70 | - | - |
| 7.1 | Doggtod office (dm) | 2015 2014 | 20 | 411 222 | 25 157 | 1087 | 66 | 4 50 | • |
| 7.1 | Roasted coffee (dry) | 2014 | 8 8 | 222 168 | 137 128 | 271 235 | 14 13 | 450 450 | 0 |
| 7.2 | Instant coffee (dry) | 2013 | 6 | 820 | 629 | 940 | 47 | 900 | $\frac{0}{2}$ |
| 7.2 | msiani cojjeć (ary) | 2015 | 6 | 629 | 574 | 742 | 26 | 900 | 0 |
| 7.3 | Substitute coffee (dry) mainly based on cereals | 2014 | 4 | 560 | 310 | 896 | 136 | 2000 | 0 |
| | | 2015 | 4 | 711 | 323 | 1087 | 167 | 2000 | 0 |
| 7.4 | Other coffee substitutes (dry) | 2014 | 2 | 81 | 7 | 155 | - | 4000 | 0 |
| | 33 | 2015 | 2 | 136 | 25 | 247 | - | 4000 | 0 |
| 8 | Baby foods , other than processed cereal based foods | 2014 | 20 | 12 | 3 | 27 | 1 | - | - |
| | - | 2015 | 22 | 13 | 3 | 60 | 3 | - | - |
| 8.1 | Baby foods not containing prunes | 2014 | 20 | 12 | 3 | 27 | 1 | 50 | 0 |
| | | 2015 | 20 | 13 | 3 | 60 | 3 | 50 | 1 |
| 8.2 | Baby foods, containing prunes | 2014 | 0 | - | - | - | - | - | - |
| | | 2015 | 2 | 7 | 5 | 9 | - | 80 | 0 |
| 9 | Processed cereal-based foods for infants and young children | 2014 | 20 | 60 | 4 | 577 | 29 | - | - |
| | v 6 | 2015 | 21 | 31 | 4 | 218 | 11 | - | - |
| 9.1 | Biscuits and rusks for infants and young children | 2014 | 8 | 65 | 4 | 165 | 20 | 200 | 0 |
| | | 2015 | 7 | 47 | 7 | 138 | 17 | 200 | 0 |
| 9.2 | 3 3 3 | 2014 | 12 | 56 | 4 | 577 | 47 | 50 | 1 |
| | children | 2015 | 14 | 23 | 4 | 218 | 15 | 50 | 1 |
| | | 2013 | 14 | 23 | 4 | 210 | 13 | 50 | 1 |

Table 2 continued...

| Food category / | Demonstrations | Sampling | | | Acryla | mide (| μg/kg) | | 117 |
|---------------------------|-------------------------------------|----------|----|------|--------|--------|--------|-----------------|--------|
| sub category ^a | Description | dateb | n | mean | min | max | SE | IV ^c | - n>IV |
| | Other products, based on | | | | | | | | |
| 10 | cereals, potatoes, cocoa and coffee | 2014 | 17 | 135 | 6 | 425 | 29 | - | - |
| | | 2015 | 17 | 189 | 4 | 735 | 54 | - | _ |
| 10.2 | Cake and pastry | 2014 | 6 | 114 | 6 | 332 | 48 | _ | _ |
| | 1 , | 2015 | 6 | 82 | 4 | 227 | 33 | _ | _ |
| 10.3 | Savoury snacks | 2014 | 2 | 72 | 18 | 126 | | _ | _ |
| | , | 2015 | 2 | 78 | 77 | 80 | _ | _ | _ |
| 10.4 | Other products, based on cereals | 2014 | 5 | 153 | 7 | 233 | 41 | _ | _ |
| | , | 2015 | 4 | 287 | 5 | 628 | 129 | _ | _ |
| 10.5 | Other products, based on potatoes | 2014 | 0 | - | - | _ | _ | _ | _ |
| | 1 , 1 | 2015 | 1 | 735 | _ | _ | _ | _ | _ |
| 10.6 | Other products, based on cocoa | 2014 | 4 | 175 | 22 | 425 | 88 | _ | _ |
| | , | 2015 | 4 | 170 | 21 | 464 | 100 | _ | _ |
| | Other products, not based on | | | | | | | | |
| 11 | cereals, potatoes, cocoa and coffee | 2014 | 12 | 436 | 12 | 1324 | 125 | - | - |
| | | 2015 | 12 | 392 | 9 | 884 | 95 | _ | _ |
| | Vegetable crisps | 2014 | 4 | 803 | 360 | 1324 | 199 | _ | _ |
| | , 1811 | 2015 | 4 | 727 | 514 | 884 | 78 | _ | _ |
| | Black olives, canned | 2014 | 2 | 650 | 269 | 1031 | - | _ | _ |
| | | 2015 | 2 | 525 | 331 | 720 | _ | _ | _ |
| | Prunes, canned | 2014 | 2 | 189 | 82 | 295 | _ | _ | _ |
| | , | 2015 | 2 | 248 | 72 | 424 | _ | _ | _ |
| | Liquorice candies | 2014 | 2 | 157 | 139 | 175 | _ | _ | _ |
| | .4 | 2015 | 2 | 51 | 35 | 68 | - | _ | _ |
| | Dates / prunes | 2014 | 2 | 14 | 12 | 16 | _ | _ | _ |
| | r | 2015 | 2 | 72 | 9 | 134 | _ | _ | _ |

^a according to EFSA^{19,20}; ^b products prepared from seasonal potatoes; ^cEC Indicative Values²¹

¹⁹ European Food Safety Authority, 2014; Specific requirements for chemical contaminants' data submission. EFSA supporting publication 2014:EN-604. 25 pp.

²⁰ European Food Safety Authority, 2015; Specific requirements for chemical contaminants' data submission. EFSA supporting publication 2015: 2015:EN-833.

²¹ Commission Recommendation of 8 November 2013 on investigations into the levels of acrylamide in food (2013/647/EU), oj L 301, 15-17, 12.11.13

5.2 FURAN

A total of 250 tests for furan were carried out on 210 samples from the 2014-15 survey. A summary of the furan concentrations (mean and range) by product category is shown in Table 3. The individual sample results for each category can be found in 6.4 of the Appendices.

Table 3. Summary of furan concentrations (mean and range) as received / consumed by product category

| Food | Description | Sampling | n | | ıran (µg | <u></u> | |
|-----------|---|----------|----|-------------------|----------|---------|-----|
| categorya | Description | date | | Mean ^b | min | max | SE |
| 5 | Breakfast cereals (excluding porridge) | 2014 | 24 | 38 | <10 | 263 | 12 |
| | | 2015 | 24 | 50 | <10 | 382 | 17 |
| 6 | Biscuits, crackers, crisp bread and similar (excluding pastry and cake) | 2014 | 24 | 34 | <10 | 135 | 8 |
| | | 2015 | 30 | 32 | N.D. | 167 | 8 |
| 7 | Coffee and coffee substitutes | 2014 | 20 | 1562 | N.D. | 5009 | 36 |
| | | 2015 | 20 | 1612 | N.D. | 5242 | 390 |
| | Coffee and coffee substitutes, as consumed | 2014 | 20 | 38 | N.D. | 137 | 11 |
| | | 2015 | 20 | 50 | N.D. | 197 | 16 |
| | Roast | 2014 | 8 | 3347 | 1786 | 5009 | 33. |
| | | 2015 | 8 | 3544 | 1767 | 5242 | 38 |
| | Roast, as consumed | 2014 | 8 | 92 | 10 | 137 | 14 |
| | | 2015 | 8 | 119 | 25 | 197 | 22 |
| | Instant | 2014 | 6 | 656 | 122 | 1296 | 20 |
| | | 2015 | 6 | 556 | 156 | 1329 | 16 |
| | Instant, as consumed | 2014 | 6 | 5 | 1 | 9 | 1 |
| | , | 2015 | 6 | 5 | 2 | 10 | 1 |
| | Other | 2014 | 6 | 87 | < 40 | 231 | 36 |
| | | 2015 | 6 | 92 | < 40 | 258 | 38 |
| | Other, as consumed | 2014 | 6 | 1 | <1 | 3 | <. |
| | , | 2015 | 6 | 1 | <1 | 4 | 1 |
| 8 | Baby foods, other than processed cereal based foods | 2014 | 20 | 31 | 6 | 76 | 4 |
| | based roods | 2015 | 22 | 24 | 3 | 81 | 4 |
| 10 | Other products, based on cereals, potatoes, cocoa and coffee | 2014 | 9 | 21 | N.D. | 77 | 9 |
| | | 2015 | 2 | 143 | 82 | 205 | - |
| | Cereal bars | 2014 | 2 | <10 | < 10 | < 10 | - |
| | | 2015 | 0 | - | - | - | - |
| | Cocoa powder | 2014 | 3 | <10 | < 10 | 26 | 9 |
| | | 2015 | 0 | - | _ | _ | - |
| | Corn / Tortilla chips | 2014 | 2 | 25 | 18 | 32 | 0 |
| | | 2015 | 0 | - | _ | _ | _ |
| | Popcorn | 2014 | 2 | 56 | 34 | 77 | _ |
| | * | 2015 | 2 | 143 | 82 | 205 | |

Table 3 continued...

| Food category ^a | Description | Sampling date | n | Fu mean ^b | ıran (µg/ min | /kg) max | SE |
|----------------------------|--|---------------|----|-------------------------|------------------|-------------|----|
| 11 | Other products, not based on cereals, potatoes, cocoa and coffee | 2014 | 12 | 11 | N.D. | 32 | 3 |
| | • | 2015 | 2 | 40 | 19 | 60 | - |
| | Canned prunes | 2014 | 2 | 22 | 11 | 32 | - |
| | • | 2015 | 2 | 40 | 19 | 60 | - |
| | Jams | 2014 | 4 | 1 | <2 | 3 | 1 |
| | | 2015 | 0 | - | - | - | - |
| | Table olives | 2014 | 2 | 11 | 11 | 11 | - |
| | | 2015 | 0 | _ | - | - | - |
| | Vegetable crisps | 2014 | 4 | 15 | 12 | 19 | 2 |
| | | 2015 | 0 | _ | - | - | - |

 $^{^{}a}$ according to EFSA 22,23 ; b Lower bound concentrations (values < LOD = 0)

²² European Food Safety Authority, 2014; Specific requirements for chemical contaminants' data submission. EFSA supporting publication 2014:EN-604. 25 pp.

European Food Safety Authority, 2015; Specific requirements for chemical contaminants' data submission. EFSA supporting publication 2015: 2015:EN-833.

6. APPENDICES

6.1 SAMPLING PLAN

Table 4. Sampling plan 2014-2015

| | | | | | | | | | | | | | | | Sam | ple nui | nbers i | in prod | luct ca | tegory | y | | | | | | | | | | |
|-----------------|----------------|--------------------|----|-------|----------------------------------|-------|-------|---|----------------|---------------------|--------------|-----------------------------------|-----|-----|-----|------------|---------|---------|----------|--------|------|--|-----|------------------|------|------|------------|------|------|--|-------|
| Category | | French: as read | | and] | Potato cr potato-l cracker | based | Frenc | Pre-coo ch fries, ucts for cooking | potato home | 4. Soft bread | cer (excl | eakfast eals uding idge) | | | | s, crisp l | | 7. (| Coffee : | | ffee | 8. Baby foods , other than processed cereal based foods | _ | -based ls for | | - | ducts, bas | | | 11. Other products, not based on cereals, potatoes, cocoa and coffee | Total |
| Sub category | | 1.1 | | 2.1 | 2.2 | 2.4 | 3.1 | 3.2 | 3.3 | 4.1 | 5.1 | 5.3 | 6.1 | 6.2 | 6.3 | 6.4 | 6.5 | 7.1 | 7.2 | 7.3 | 7.4 | 8.1 | 9.1 | 9.2 | 10.2 | 10.3 | 10.4 | 10.5 | 10.6 | | |
| Jan-14 | | | | | | | | | | 20 | | | | | | | | | | | | | | | | | | | | | 20 |
| Feb | | | | | | | | | | | 5 | 19 | | | | | | | | | | | | | | | | | | | 24 |
| Mar | 8 ^a | 4 ^b | 8° | 10 | | | 6 | 2 | 6 | | | | | | | | | | | | | | | | | | | | | | 44 |
| Apr | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| May | | | | | | | | | | | | | 6 | 3 | 8 | 4 | 3 | | | | | | | | | | | | | | 24 |
| Jun | | | | | | | | | | | | | | | | | | 8 | 6 | 4 | 2 | | | | | | | | | | 20 |
| Jul | | | | | | | | | | | | | | | | | | | | | | 20 | | | | | | | | | 20 |
| Aug | | | | | | | | | | | | | | | | | | | | | | | 10 | 10 | | | | | | | 20 |
| Sep | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 2 | 3 | | | 4 | 15 |
| Oct | | | | | 1 | 5 | | | | | | | | | | | | | | | | | | | | | 1 | | 4 | 12 | 23 |
| Nov | 8 ^a | 4 ^b | 8° | 10 | | | 6 | 2 | 7 | | | | | | | | | | | | | | | | | | | 1 | | | 47 |
| Dec | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | 16 | 8 | 16 | 21 | 1 | 5 | 12 | 4 | 13 | 20 | 5 | 19 | 6 | 3 | 8 | 4 | 3 | 8 | 6 | 4 | 2 | 20 | 10 | 10 | 6 | 2 | 4 | 1 | 4 | 16 | 257 |
| by category | | 40 | | | 27 | | | 29 | | 20 | 2 | 24 | | l | 24 | l | | | 2 | 0 | ı | 20 | 2 | 20 | | | 17 | | | 16 | 257 |

^a Restaurants; ^b Fast food outlets; ^c Chip Shops

Table 4 continued...

| | | | | | | | | | | | | | | | | S | Sample | numbei | s in pro | duct ca | ategory | , | | | | | | | | | | | | |
|-----------------|----------------|-------------------------------|----|-------|---------------------------------|-------|----|-----------------------------------|---------------|------------|-------------|-----|---------------------------------|-----|-----|---------|--------|------------------|----------|---------|-----------------|---------|------|------------|--------------------------------------|--------------------------------|------------------------------------|------|------|-----------------------|------|------|--|-------|
| Category | solo | rench i d as rea to eat | | and j | Potato c potato-l cracker | based | Fr | Pre-coorench fra ato proconome co | ies, ducts | 4. : br | Soft ead | (| Breakfa cereals excluding | ng | | similar | | s, crisp ding pa | | 7. (| Coffee subst | and cof | ffee | other proc | Baby ods , r than essed real sed ods | Proc cer based for in | essed eal- foods nfants young dren | | _ | lucts, ba cocoa ar | | | 11. Other products, not based on cereals, potatoes, cocoa and coffee | Total |
| Sub category | | 1.1 | | 2.1 | 2.2 | 2.4 | 6 | 3.2 | 3.3 | 4.1 | 4.2 | 5.1 | 5.2 | 5.3 | 6.1 | 6.2 | 6.3 | 6.4 | 6.5 | 7.1 | 7.2 | 7.3 | 7.4 | 8.1 | 8.2 | 9.1 | 9.2 | 10.2 | 10.3 | 10.4 | 10.5 | 10.6 | | |
| Jan-15 | | | | | | | | | | 24 | 1 | | | | | | | | | | | | | | | | | | | | | | | 25 |
| Feb | | | | | | | | | | | | 5 | | 19 | | | | | | | | | | | | | | | | | | | | 24 |
| Mar | 8ª | 4 ^b | 8c | 11 | | | 6 | 2 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | 46 |
| Apr | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| May | | | | | | | | | | | | | | | 6 | 3 | 11 | 4 | 6 | | | | | | | | | | | | | | | 30 |
| Jun | | | | | | | | | | | | | | | | | | | | 8 | 6 | 4 | 2 | | | | | | | | | | | 20 |
| Jul | | | | | | | | | | | | | | | | | | | | | | | | 20 | 3 | | | | | | | | | 23 |
| Aug | | | | | | | | | | | | | | | | | | | | | | | | | | 10 | 10 | | | | | | | 20 |
| Sep | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 2 | 3 | | | 4 | 15 |
| Oct | | | | | 1 | 5 | | | | | | | | | | | | | | | | | | | | | | | | 1 | | 4 | 8 | 19 |
| Nov | 8 ^a | 4 ^b | 8° | 11 | | | 6 | 2 | 7 | | | | | | | | | | | | | | | | | | | | | | 1 | | | 47 |
| Dec | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | 16 | 8 | 16 | 22 | 1 | 5 | 12 | 4 | 14 | 24 | 1 | 5 | | 19 | 6 | 3 | 11 | 4 | 6 | 8 | 6 | 4 | 2 | 20 | 3 | 10 | 10 | 6 | 2 | 4 | 1 | 4 | 12 | 269 |
| by category | | 40 | | | 28 | | | 30 | 1 | 2 | 25 | | 24 | ı | | | 30 | ı | | | 2 | 20 | ı | 2 | 23 | 2 | 20 | | 1 | 17 | | 1 | 12 | 269 |

^a Restaurants; ^b Fast food outlets; ^c Chip Shops

6.2 SAMPLE PREPARATION DETAILS AND ANALYTICAL METHODS

6.2.1 Sample preparation

All samples were prepared according to the Food Standards Agency "Guidelines for undertaking surveys"²⁴. Where practical, digital images (samples and packaging) were recorded and all packaging retained.

Potato products for home cooking from Category 3 and popcorn (Category 10) were cooked according to the manufacturers' guidelines using domestic appliances e.g. oven, grill, microwave, deep fat fryer (see Table 5). The grill and oven were preheated for 5-10 minutes and a single layer of the product was applied to a baking try (placed in middle of oven) or mesh grill pan respectively; samples were typically turned at half of the recommended cooking time. Pure sunflower oil was used for frying.

Coffee and coffee substitute samples were prepared according to the manufacturers guidelines given on the packaging: retail domestic coffee preparation equipment was used as required, e.g. a cafetiere or espresso coffee maker (see Table 6).

6.2.1.1 Homogenisation

Samples requiring furan analysis, e.g. jars and packets were separated and retained for individual processing; coffee and coffee substitutes prepared for consumption were analysed immediately after the preparation cycle. These samples were not subjected to bulk homogenisation as this would have resulted in significant losses of volatile furan.

Where practical, entire samples (approximately 1kg) were homogenised using a food processor:

- Potato products from Categories 1, 3 and 10 and liquorice from category 11 were homogenized with water (1:2 sample/water w/w) using a high speed blender or food processor.
- Canned products were drained & stones removed prior to homogenization.
- A domestic cheese grater was used for the chocolate.
- Bread from Category 4 was air-dried (weight loss recorded) prior to homogenising.
- Category 7 and 9 samples (ground/milled products) were mixed thoroughly prior to analysis
 - o A coffee grinder was used for the whole coffee beans.

An aliquot of the homogenised sample was taken for analysis while the remainder was divided into four pots and stored at -18°C.

6.2.1.2 Homogeneity testing

Representative samples from Categories 1-11 were selected at random and the homogeneity determined by replicate (6) sodium analyses. This was based on the assumption that both sodium and the analytes of interest

²⁴ Guidelines for undertaking surveys. Available at: https://www.food.gov.uk/sites/default/files/multimedia/pdfs/fsasurveysguidance.pdf [accessed June 2015]

had an equivalent distribution in these samples. Samples were confirmed as homogeneous by comparing the relative standard deviation (RSD) of the replicate measurements with that obtained from method control samples using a statistical F-test.

Samples (2-3 g) were treated with hot concentrated nitric acid prior to determination by atomic absorption spectroscopy on a PE 2100 (Perkin Elmer, USA) according to the procedure of Gorsuch²⁵. Each batch was analysed with a blank and an in-house reference material.

Table 5. Details of the domestic cooking conditions

Category 3 – March 2014 samples

| Sample code | Food sub- category code | Product description | Brand | Best before date | Date of cooking | Cooking conditions |
|---------------|-------------------------------|---------------------------------------|---------------------------------------|------------------|-----------------|------------------------|
| 14C- 02166 | 3.1 | Straight cut oven chips | Sainsbury's Be Good to Yourself | FEB 2016 | 25/06/2014 | Oven200°C~23min |
| 14C- 02167 | 3.1 | Thin & crispy oven chips | Tesco | 03/2015 | 09/07/2014 | Oven200°C~14min |
| 14C- 02168 | 3.1 | Crispy French fries | McCain | 08 2015 | 09/07/2014 | Oven220°C~14min |
| 14C- 02169 | 3.2 | Straight cut frying chips | Waitrose Essential | MAY2015 | 09/07/2014 | Fryer175°C~4min |
| 14C- 02170 | 3.1 | Chunky chips | Tesco Finest | None declared | 27/06/2014 | Oven170°C~30min |
| 14C- 02171 | 3.3 | Crispy roast potatoes with goose fat | Sainsbury's Taste the Difference | None declared | 27/06/2014 | Oven200°C~40min |
| 14C- 02172 | 3.1 | Organic straight cut oven chips | Waitrose Organic | APR 2015 | 09/07/2014 | Oven210°C~20min |
| 14C- 02173 | 3.1 | Homestyle chips | Aunt Bessie's | JUL 2015 | 27/06/2014 | Oven210°C~20min |
| 14C- 02174 | 3.2 | Straight cut oven chips | Asda | 30/11/2014 | 09/07/2014 | Fryer175°C~5min |
| 14C- 02175 | 3.3 | Crispy potatoes | Sainsbury's | NOV 2015 | 25/06/2014 | Oven200°C~25min |
| 14C- 02176 | 3.3 | Potato waffles - 10 | Birds Eye | 08 2015 | 09/07/2014 | Grill_High~5min |
| 14C- 02177 | 3.3 | Oven cook roast potatoes | Asda | 26 FEB 2015 | 25/06/2014 | Oven200°C~30min |
| 14C- 02178 | 3.3 | Smiles | McCain | 07 2015 | 09/07/2014 | Oven200°C~15min |
| 14C- 02179 | 3.3 | Micro chips | McCain | 11 2014 | 09/07/2014 | Microwave1000W~3.67min |

 $^{^{25}}$ Gorsuch, T., T., 1970. The Destruction of Organic Matter. Pergamon Press. p21 $\,$

Table 5. Continued...

Category 3 – March 2015 samples

| Sample code | Food sub- category code | Product description | Brand | Best before date | Date of cooking | Cooking conditions |
|---------------|-------------------------------|---------------------------------------|---------------------------------------|------------------|-----------------|-------------------------------------|
| 15C- 02774 | 3.1 | Straight cut oven chips | Sainsbury's Be Good to Yourself | JAN 2017 | 06/05/2015 | Oven200°C~23min |
| 15C- 02775 | 3.1 | Thin & crispy oven chips | Tesco | 01/2016 | 06/05/2015 | Oven200°C~14min |
| 15C- 02776 | 3.1 | Crispy French fries | McCain | 08 2016 | 06/05/2015 | Oven220°C~14min |
| 15C- 02777 | 3.2 | Straight cut frying chips | Waitrose Essential | AUG 2016 | 23/05/2015 | Fryer175°C~4min |
| 15C- 02778 | 3.1 | Chunky chips | Tesco Finest | None declared | 06/05/2015 | Oven170°C~30min |
| 15C- 02779 | 3.3 | Crispy roast potatoes with goose fat | Sainsbury's Taste the Difference | None declared | 06/05/2015 | Oven200°C~40min |
| 15C- 02780 | 3.1 | Organic straight cut oven chips | Waitrose Duchy Organic | NOV 2015 | 06/05/2015 | Oven200°C~20min |
| 15C- 02781 | 3.1 | Homestyle chips | Aunt Bessie's | JUL 2016 | 15/05/2015 | Oven210°C~20min |
| 15C- 02782 | 3.2 | Straight cut oven chips | Asda | 22/01/2016 | 23/05/2015 | Fryer175°C~5min |
| 15C- 02783 | 3.3 | Crispy potatoes | Sainsbury's | FEB 2017 | 15/05/2015 | Oven200°C~25min |
| 15C- 02784 | 3.3 | Potato waffles - 10 | Birds Eye | 08 2016 | 15/05/2015 | Grill_High~5min |
| 15C- 02785 | 3.3 | Oven cook roast potatoes | Asda | 23 FEB 2016 | 15/05/2015 | Oven200°C~30min |
| 15C- 02786 | 3.3 | Smiles | McCain | 08 2016 | 15/05/2015 | Oven200°C~15min |
| 15C- 02787 | 3.3 | Micro chips | McCain | 11 2015 | 15/05/2015 | 2 boxes: Microwave1000W~3.20min |
| 15C- 02788 | 3.3 | Ready baked jackets (4) | McCain | 01/2016 | 23/05/2015 | 4 potatoes: Microwave1000W~15min |

Table 5. Continued...

Category 3 – November 2014 samples

| Sample code | Food sub- category code | Product description | Brand | Best before date | Date of cooking | Cooking conditions |
|---------------|-------------------------------|---------------------------------------|---------------------------------------|------------------|-----------------|-----------------------|
| 14C- 02290 | 3.1 | Straight cut oven chips | Sainsbury's Be Good to Yourself | SEP 2016 | 22/12/2014 | Oven200°C~23min |
| 14C- 02291 | 3.1 | Thin & crispy oven chips | Tesco | 09/2015 | 22/12/2014 | Oven200°C~14min |
| 14C- 02292 | 3.1 | Crispy French fries | McCain | 04 2016 | 22/12/2014 | Oven220°C~14min |
| 14C- 02293 | 3.2 | Straight cut frying chips | Waitrose Essential | MAR2016 | 14/01/2015 | Fryer175°C~4min |
| 14C- 02294 | 3.1 | Chunky chips | Tesco Finest | None declared | 22/12/2014 | Oven170°C~40min |
| 14C- 02295 | 3.3 | Crispy roast potatoes with goose fat | Sainsbury's Taste the Difference | None declared | 22/12/2014 | Oven200°C~55min |
| 14C- 02296 | 3.1 | Organic straight cut oven chips | Waitrose Organic | APR 2015 | 22/12/2014 | Oven210°C~20min |
| 14C- 02297 | 3.1 | Homestyle chips | Aunt Bessie's | FEB 2016 | 22/12/2014 | Oven210°C~20min |
| 14C- 02298 | 3.2 | Straight cut oven chips | Asda | 22/09/2015 | 14/01/2015 | Fryer175°C~5min |
| 14C- 02299 | 3.3 | Crispy potatoes | Sainsbury's | OCT 2016 | 22/12/2014 | Oven200°C~25min |
| 14C- 02300 | 3.3 | Potato waffles - 10 | Birds Eye | 04 2016 | 14/01/2015 | Grill_High~8min |
| 14C- 02301 | 3.3 | Oven cook roast potatoes | Asda | 30 SEP 2015 | 22/12/2014 | Oven200°C~30min |
| 14C- 02302 | 3.3 | Smiles | McCain | 03 2016 | 22/12/2014 | Oven200°C~15min |
| 14C- 02303 | 3.3 | Micro chips | McCain | 07 2015 | 14/01/2015 | Microwave1000W~3.3min |
| 14C- 02304 | 3.3 | Ready baked jackets (2) | McCain | 03 2015 | 14/01/2015 | Microwave1000W~7.0min |

Table 5. Continued...

Category 3 – November 2015 samples

| Sample code | Food sub- category code | Product description | Brand | Best before date | Date of cooking | Cooking conditions |
|---------------|-------------------------------|---------------------------------------|--|------------------|-----------------|-----------------------------|
| 15C- 02947 | 3.1 | Straight cut oven chips | Sainsbury's Be Good to Yourself | OCT 2017 | 09/12/2015 | Oven180°C~23min |
| 15C- 02948 | 3.1 | Thin & crispy oven chips | Tesco | 08/2016 | 09/12/2015 | Oven200°C~15min |
| 15C- 02949 | 3.1 | Crispy French fries | McCain | 02 2017 | 09/12/2015 | Oven220°C~15min |
| 15C- 02950 | 3.2 | Straight cut frying chips | Waitrose Essential | APR2017 | 14/12/2015 | Fryer175°C~5min |
| 15C- 02951 | 3.1 | Chunky chips | Tesco Finest | None declared | 08/12/2015 | Oven170°C~40min |
| 15C- 02952 | 3.3 | Crispy roast potatoes with goose fat | Sainsbury's Taste the Difference | None declared | 08/12/2015 | Oven200°C~60min |
| 15C- 02953 | 3.1 | Organic straight cut oven chips | Waitrose Duchy Organic | APR 2017 | 09/12/2015 | Oven200°C~21min |
| 15C- 02954 | 3.1 | Homestyle chips | Aunt Bessie's | 03/2017 | | Oven200°C~21min |
| 15C- 02955 | 3.2 | Straight cut oven chips | Asda | 01/08/2016 | 14/12/2015 | Fryer175°C~5min |
| 15C- 02956 | 3.3 | Crispy potatoes | Asda | 22/10/2016 | 08/12/2015 | Oven200°C~20min |
| 15C- 02957 | 3.3 | Potato waffles - 10 | Birds Eye | 03 2017 | 14/12/2015 | Grill_High~7min |
| 15C- 02958 | 3.3 | Oven cook roast potatoes | Asda | 23 OCT 2016 | 08/12/2015 | Oven200°C~31min |
| 15C- 02959 | 3.3 | Smiles | McCain | 04 2017 | 14/12/2015 | Oven205°C~15min |
| 15C- 02960 | 3.3 | Micro chips | McCain | JUL 2016 | 14/12/2015 | Microwave1000W~3.20min/200g |
| 15C- 02961 | 3.3 | Ready baked jackets (4) | McCain | 09 2016 | 14/12/2015 | Microwave1000W~15min |

Table 5. Continued...

Category 10 - 2014 samples

| Sample code | Food sub- category code | Product description | Brand | Best before date | Date of cooking | Cooking conditions |
|---------------|-------------------------------|---------------------------------------|------------|------------------|-----------------|---------------------|
| 14C- 02309 | 10.4 | Sweet microwave popcorn | Butterkist | 09.2015 | 30/10/2014 | Microwave1000W~2min |
| 14C- 02310 | 10.4 | Sweet & salty microwave popcorn | Popz | 05.2016 | 30/10/2014 | Microwave1000W~2min |

Category 10 - 2015 samples

| Sample code | Food sub- category code | Product description | Brand | Best before date | Date of cooking | Cooking conditions |
|---------------|----------------------------|---------------------------------------|------------|------------------------|-----------------|---------------------|
| 15C- 02890 | 10.4 | Sweet microwave popcorn | Butterkist | 07.2016 | 23/02/2016 | Microwave1000W~2min |
| 15C- 02891 | 10.4 | Sweet & salty microwave popcorn | Popz | 05.2017 | 23/02/2016 | Microwave1000W~2min |

Table 6. Details of the domestic preparation of coffee and coffee substitutes prior to the analysis of furan "as consumed".

Category 7 - 2014 samples

| Sample | Product description | Brand | Best before | Date of | Preparation |
|---------------|--|----------------------------------|------------------|-------------|-----------------------|
| code | | | date | preparation | conditions |
| 14C- 02200 | Coffee one-cup bags | Lyons | NOV 15 | 10/07/2014 | Freshly boiled water |
| 14C- 02201 | Espresso roasted & ground coffee | Waitrose | FEB 15 | 10/07/2014 | Espresso coffee maker |
| 14C- 02202 | Guatemala Arabica ground coffee | Percol | NOV 2015 | 10/07/2014 | Espresso coffee maker |
| 14C- 02203 | Gajah mountain, Sumatra cafetiere grind coffee | Union Hand-Roasted Coffee | None declared | 10/07/2014 | Espresso coffee maker |
| 14C- 02204 | Java Sumatra roast & ground coffee | Tesco Finest | MAY 2015 | 10/07/2014 | Cafetiere |
| 14C- 02205 | Colombian Fairtrade coffee beans | Sainsbury's Taste the Difference | APR 2015 | 10/07/2014 | Cafetiere |
| 14C- 02206 | Colombian Fairtrade ground coffee | Marks & Spencer | 04 2015 | 10/07/2014 | Cafetiere |
| 14C- 02207 | Monsoon Malabar coffee beans | Whittard of Chelsea | None declared | 10/07/2014 | Cafetiere |
| 14C- 02208 | Freeze dried soluble coffee | Nescafé Gold Blend | 05 2016 | 10/07/2014 | Freshly boiled water |
| 14C- 02209 | Freeze dried decaffeinated soluble coffee | Nescafé Gold Blend Decaff | 06 2016 | 10/07/2014 | Freshly boiled water |
| 14C- 02210 | Freeze dried instant coffee | Kenco | APR 16 | 10/07/2014 | Freshly boiled water |
| 14C- 02211 | Freeze dried decaffeinated instant coffee | Kenco Decaff | MAR 16 | 10/07/2014 | Freshly boiled water |
| 14C- 02212 | Freeze dried instant coffee | Carte Noire | 04/16 | 10/07/2014 | Freshly boiled water |
| 14C- 02213 | Freeze dried decaffeinated instant coffee | Carte Noire Decaff | 05/16 | 10/07/2014 | Freshly boiled water |
| 14C- 02214 | Chicory & coffee essence | Camp | 24 02 16 | 10/07/2014 | Freshly boiled water |
| 14C- 02215 | Instant dandelion coffee compound | Symingtons | NOV 2015 | 10/07/2014 | Freshly boiled water |
| 14C- 02216 | Organic grain coffee substitute | Lima Yannoh Instant | 10.12.2015 | 10/07/2014 | Freshly boiled water |
| 14C- 02217 | Guarana-based coffee alternative | Whole Earth Wake Up | JANUARY 2016 | 10/07/2014 | Freshly boiled water |
| 14C- 02218 | Instant cereal drink | Barley Cup Original | 01.10.2015 | 10/07/2014 | Freshly boiled water |
| 14C- 02219 | Instant grain beverage | Biona Organic Biomalt | 01-17 | 10/07/2014 | Freshly boiled water |

Table 6 continued...

Category 7 - 2015 samples

| Sample code | Product description | Brand | Best before date | Date of preparation | Preparation conditions |
|---------------|--|----------------------------------|------------------|---------------------|------------------------|
| 15C- 02819 | Coffee bags | Lyons | NOV 2016 | 09/09/2015 | Freshly boiled water |
| 15C- 02820 | Espresso roasted & ground coffee | Waitrose | MAY 16 | 09/09/2015 | Espresso coffee maker |
| 15C- 02821 | Guatemala Arabica ground coffee | Percol | 08.2016 | 09/09/2015 | Espresso coffee maker |
| 15C- 02822 | Gajah mountain, Sumatra cafetiere grind coffee | Union Hand-Roasted Coffee | None declared | 09/09/2015 | Espresso coffee maker |
| 15C- 02823 | Java Sumatra roast & ground coffee | Tesco Finest | APR 2016 | 09/09/2015 | Cafetiere |
| 15C- 02824 | Colombian Fairtrade coffee beans | Sainsbury's Taste the Difference | MAR 2016 | 09/09/2015 | Cafetiere |
| 15C- 02825 | Colombian ground coffee | Marks & Spencer | 03 2016 | 09/09/2015 | Cafetiere |
| 15C- 02826 | Monsoon Malabar Indian coffee beans | Whittard of Chelsea | None declared | 09/09/2015 | Cafetiere |
| 15C- 02827 | Freeze dried soluble coffee | Nescafé Gold Blend | 05 2017 | 09/09/2015 | Freshly boiled water |
| 15C- 02828 | Freeze dried decaffeinated soluble coffee | Nescafé Gold Blend Decaff | 05.2017 | 09/09/2015 | Freshly boiled water |
| 15C- 02829 | Freeze dried instant coffee | Kenco | FEB 17 | 10/09/2015 | Freshly boiled water |
| 15C- 02830 | Freeze dried decaffeinated instant coffee | Kenco Decaff | MAR 17 | 10/09/2015 | Freshly boiled water |
| 15C- 02831 | Freeze dried instant coffee | Carte Noire | 05/17 | 10/09/2015 | Freshly boiled water |
| 15C- 02832 | Freeze dried decaffeinated instant coffee | Carte Noire Decaff | 05/17 | 10/09/2015 | Freshly boiled water |
| 15C- 02833 | Chicory & coffee essence | Camp | 06 04 17 | 10/09/2015 | Freshly boiled water |
| 15C- 02834 | Instant dandelion coffee compound | Symingtons | DEC 2016 | 10/09/2015 | Freshly boiled water |
| 15C- 02835 | Organic grain coffee substitute | Lima Yannoh Instant | 25.02.2017 | 10/09/2015 | Freshly boiled water |
| 15C- 02836 | Guarana-based coffee alternative | Whole Earth Wake Up | APRIL 2016 | 10/09/2015 | Freshly boiled water |
| 15C- 02837 | Instant cereal drink | Barley Cup Original | 09.10.2017 | 10/09/2015 | Freshly boiled water |
| 15C- 02838 | Organic instant cereal drink | Biona Organic Biomalt | 03-18 | 10/09/2015 | Freshly boiled water |

6.2.2 Acrylamide analysis by GC/MS/MS

Acrylamide was determined as the brominated derivative, 2-bromopropenamide, according to the method of Hamlet and Sadd²⁶.

Method performance (typical): limits of detection (LOD) and quantification (LOQ) were 0.5 and 3.0 μ g/kg respectively; the estimated value for the method uncertainty (single determination) was: $\pm 14\%$ at 49 μ g/kg (expanded relative uncertainty with a coverage factor of 2). A summary of the method performance data from this survey can be found in Table 7.

6.2.3 Analysis of furan by GC/MS

Furan was measured in samples using a headspace method adapted from the procedure of Becalski *et al*²⁷. Prechilled samples were homogenised at 3°C with deionised water and an aliquot was contained in a headspace vial. Deuterium labelled furan (internal standard) was added and the samples incubated at 35°C prior to sampling the headspace for GC/MS analysis. Because of the volatile nature of furan all samples were analysed in duplicate: either single analyses of duplicate packs or duplicate analyses of single packs (depending upon availability).

Method performance (10g sample, typical): The LOD and LOQ were 1 μ g/kg and 2.5 μ g/kg respectively (unless indicated otherwise in the results); the estimated uncertainty for a single determination over the concentration range 20-100 μ g/kg furan was \pm 20% (expanded relative uncertainty with a coverage factor of 2). A summary of the method performance data from this survey can be found in Table 7.

6.3 ANALYTICAL QUALITY ASSURANCE

All analyses were performed by trained staff in a UKAS accredited laboratory operating an internal audit and review process. All the test methods were all validated in-house and accredited by UKAS (ISO 17025).

Each batch of samples included a procedural blank and an In-House Reference Material (IHRM) and / or spiked sample. Method performance was monitored by assessing the data from IHRMs and / or spiked reference materials in accordance with the rules governing Shewhart control charts²⁸ (this data is summarised in Table 7). The laboratory also participated in the FAPAS proficiency testing schemes available for acrylamide and furan (see Table 8). In addition, 10% of all samples were subjected to a repeat analysis: acceptance criteria for reporting of all results was for the duplicate measurement to be within $\pm 10\%$ of the first measurement.

²⁶ Hamlet, C. G., & Sadd, P. A. (2004) Rapid, sensitive and selective analysis of acrylamide in cereal products using bromination and GC/MS/MS. *Czech Journal of Food Sciences*. 22, 290-293.

²⁷ Becalski, A., Forsyth, D., Casey, V., Lau, B.P.-Y., Pepper, K., Seaman, S. (2005), Development and validation of a headspace method for determination of furan in food. *Food Additives and Contaminants*, 22 (6), 535-540.

²⁸ BS 7785:1994, ISO 8258:1991, Shewhart control charts, British Standards Institution. Available at: http://www.bsonline.bsi-global.com/server/index.jsp

Table 7. Summary of data obtained from the analysis of IHRMs and spiked samples during this survey (A) Acrylamide IHRM data

| Year | Reference | | Accepte | d value (μg/kg |) | | Measured values (μg/kg) | | | |
|-------|---------------------|----|---------|--------------------|------|----|-------------------------|-----------|------|--|
| i ear | material | n | mean | range ^a | SE | n | mean | range | SE | |
| 2014 | IHRM A ^b | 12 | 73.0 | 68.5-77.5 | 0.43 | 9 | 73.4 | 70.0-76.6 | 0.84 | |
| | IHRM B ^b | 12 | 70.3 | 60.8-79.8 | 0.91 | 11 | 67.2 | 62.1-73.0 | 1.20 | |
| 2015 | IHRM C ^b | 12 | 44.3 | 40.8-47.7 | 0.33 | 13 | 43.7 | 41.2-46 | 0.38 | |
| | IHRM D ^b | 10 | 64.0 | 58.5-69.6 | 0.59 | 6 | 64.5 | 62.0-67.6 | 0.93 | |

^a upper and lower action limits; ^b dried cereal based materials

(B) Furan spiked recovery data

| Vaan | Naminal aniles level (ug/kg) | Recovery (%) ^a | | | | | | |
|------|------------------------------|---------------------------|-------|------------|-----|--|--|--|
| Year | Nominal spike level (μg/kg) | n | mean | range | SE | | | |
| 2014 | 10-50 | 19 | 95.2 | 80.0-112.2 | 1.8 | | | |
| | 140-200 | 7 | 95.3 | 83.4-108.7 | 3.6 | | | |
| | 470-500 | 10 | 99.7 | 92.0-107.1 | 1.3 | | | |
| | 1900 | 2 | 99.1 | 98.4-99.7 | - | | | |
| 2015 | 14-45 | 10 | 100.8 | 80.5-118.8 | 3.7 | | | |
| | 143-475 | 12 | 100.4 | 94.9-118.5 | 2.5 | | | |
| | 799-1984 | 3 | 90.4 | 82.3-95.1 | 4.1 | | | |

^a the acceptable recovery range was 80-120%

Table 8. FAPAS z-scores

| Contaminant | Series | n | z-score | | |
|-------------------------|--------|---|---------|-------------|--|
| Contaminant | | n | mean | range | |
| Acrylamide ^a | 30 | 6 | 0.0 | -0.4 to 0.4 | |
| Furan ^b | 30 | 2 | 0.7 | 0.4-1 | |

 $^{^{\}rm a}$ Jan 2014 – Sep 2015 ; $^{\rm b}$ 2 Sep 2007 - May 2015

6.4 INDIVIDUAL SAMPLE RESULTS

Category 1 French fries from fresh potatoes – March 2014 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|---------------------|------------------------------|------------------|----------------|----------------------------|-------------------------|-----------------------|
| 14C-02136 | Regular fries | Burger King | Not applicable | Not applicable | UK | Newmarket | 587 |
| 14C-02137 | Chips | Café Fresco | Not applicable | Not applicable | UK | Cardiff | 138 |
| 14C-02138 | Chips | Canton Fish Bar | Not applicable | Not applicable | UK | Cardiff | 130 |
| 14C-02139 | Chips | Zero Plus Fish Bar | Not applicable | Not applicable | UK | Cardiff | 114 |
| 14C-02140 | Chips | City Restaurant | Not applicable | Not applicable | UK | Edinburgh | 56 |
| 14C-02141 | Chips | The Abbey | Not applicable | Not applicable | UK | Edinburgh | 31 |
| 14C-02142 | Chips | Marco's Fish Bar | Not applicable | Not applicable | UK | Birmingham | 116 |
| 14C-02143 | Chips | Newton Fish Bar | Not applicable | Not applicable | UK | Birmingham | 29 |
| 14C-02144 | Chips | Moto The Kitchen | Not applicable | Not applicable | UK | Wolverhampton | 297 |
| 14C-02145 | Regular fries | KFC | Not applicable | Not applicable | UK | Newmarket | 499 |
| 14C-02146 | Chips | Hightown Fish & Chip Shop | Not applicable | Not applicable | UK | Congleton | 351 |
| 14C-02147 | Side chips | DV8 | Not applicable | Not applicable | UK | Congleton | 169 |
| 14C-02148 | Hand cut chips | The Trinity | Not applicable | Not applicable | UK | London | 136 |
| 14C-02149 | Large fries | McDonalds | Not applicable | Not applicable | UK | Cardiff | 485 |
| 14C-02150 | Chips | Perfect Fried Chicken | Not applicable | Not applicable | UK | London | 153 |
| 14C-02151 | Chips | Silver Lounge Café | Not applicable | Not applicable | UK | Larne | 98 |
| 14C-02152 | Chips | The Upper Crust | Not applicable | Not applicable | UK | Larne | 96 |
| 14C-02153 | Chips | Arcade Chip Shop | Not applicable | Not applicable | UK | Antrim | 92 |
| 14C-02154 | Chunky chips | Sainsbury's Café | Not applicable | Not applicable | UK | Cambridge | 83 |
| 14C-02155 | Chips | Khangs Fish & Chips | Not applicable | Not applicable | UK | Cambridge | 53 |

Category 1 French fries from fresh potatoes – November 2014 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|---------------------|------------------------------|------------------|----------------|----------------------------|-------------------------|--------------------|
| 14C-02260 | Regular fries | Burger King | Not applicable | Not applicable | UK | Newmarket | 67 |
| 14C-02261 | Chips | Café Fresco | Not applicable | Not applicable | UK | Cardiff | 106 |
| 14C-02262 | Chips | Canton Fish Bar | Not applicable | Not applicable | UK | Cardiff | 12 |
| 14C-02263 | Chips | Zero Plus Fish Bar | Not applicable | Not applicable | UK | Cardiff | 120 |
| 14C-02264 | Chips | City Restaurant | Not applicable | Not applicable | UK | Edinburgh | 188 |
| 14C-02265 | Chips | The Abbey | Not applicable | Not applicable | UK | Edinburgh | 20 |
| 14C-02266 | Chips | Marco's Fish Bar | Not applicable | Not applicable | UK | Birmingham | 100 |
| 14C-02267 | Chips | Newton Fish Bar | Not applicable | Not applicable | UK | Birmingham | 97 |
| 14C-02268 | Chips | Moto The Kitchen | Not applicable | Not applicable | UK | Wolverhampton | 108 |
| 14C-02269 | Regular fries | KFC | Not applicable | Not applicable | UK | Edinburgh | 250 |
| 14C-02270 | Chips | Hightown Fish & Chip Shop | Not applicable | Not applicable | UK | Congleton | 253 |
| 14C-02271 | Side chips | DV8 | Not applicable | Not applicable | UK | Congleton | 85 |
| 14C-02272 | Hand cut chips | The Trinity | Not applicable | Not applicable | UK | London | 170 |
| 14C-02273 | Large fries | McDonalds | Not applicable | Not applicable | UK | Cardiff | 155 |
| 14C-02274 | Chips | Perfect Fried Chicken | Not applicable | Not applicable | UK | London | 196 |
| 14C-02275 | Chips | Silver Lounge Café | Not applicable | Not applicable | UK | Larne | 177 |
| 14C-02276 | Chips | The Upper Crust | Not applicable | Not applicable | UK | Larne | 71 |
| 14C-02277 | Chips | Arcade Chip Shop | Not applicable | Not applicable | UK | Antrim | 34 |
| 14C-02278 | Chunky chips | Sainsbury's Café | Not applicable | Not applicable | UK | Cambridge | 326 |
| 14C-02279 | Chips | Khangs Fish & Chips | Not applicable | Not applicable | UK | Cambridge | 39 |

Category 1 French fries from fresh potatoes – March 2015 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (μg/kg) |
|-------------|---------------------|-----------------------|------------------|----------------|----------------------------|-------------------------|--------------------|
| 15C-02743 | Regular fries | Burger King | Not applicable | Not applicable | UK | Newmarket | 446 |
| 15C-02744 | Chips | Café Fresco | Not applicable | Not applicable | UK | Cardiff | 90 |
| 15C-02745 | Chips | Canton Fish Bar | Not applicable | Not applicable | UK | Cardiff | 40 |
| 15C-02746 | Chips | Zero Plus Fish Bar | Not applicable | Not applicable | UK | Cardiff | 135 |
| 15C-02747 | Chips | City Restaurant | Not applicable | Not applicable | UK | Edinburgh | 111 |
| 15C-02748 | Chips | The Abbey | Not applicable | Not applicable | UK | Edinburgh | 246 |
| 15C-02749 | Chips | Marco's Fish Bar | Not applicable | Not applicable | UK | Birmingham | 75 |
| 15C-02750 | Chips | Newton Fish Bar | Not applicable | Not applicable | UK | Birmingham | 34 |
| 15C-02751 | Chips | Moto The Kitchen | Not applicable | Not applicable | UK | Wolverhampton | 174 |
| 15C-02752 | Regular fries | KFC | Not applicable | Not applicable | UK | Edinburgh | 281 |
| 15C-02753 | Chips | 21 Fish & Chips | Not applicable | Not applicable | UK | Congleton | 255 |
| 15C-02754 | Side chips | DV8 | Not applicable | Not applicable | UK | Congleton | 136 |
| 15C-02755 | Hand cut chips | The Trinity | Not applicable | Not applicable | UK | London | 77 |
| 15C-02756 | Large fries | McDonalds | Not applicable | Not applicable | UK | Cardiff | 341 |
| 15C-02757 | Chips | Perfect Fried Chicken | Not applicable | Not applicable | UK | London | 65 |
| 15C-02758 | Chips | Silver Lounge Café | Not applicable | Not applicable | UK | Larne | 187 |
| 15C-02759 | Chips | The Upper Crust | Not applicable | Not applicable | UK | Larne | 138 |
| 15C-02760 | Chips | Arcade Chip Shop | Not applicable | Not applicable | UK | Antrim | 149 |
| 15C-02761 | Chunky chips | Sainsbury's Café | Not applicable | Not applicable | UK | Cambridge | 472 |
| 15C-02762 | Chips | Khangs Fish & Chips | Not applicable | Not applicable | UK | Cambridge | 129 |

Category 1 French fries from fresh potatoes – November 2015 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (μg/kg) |
|-------------|---------------------|-----------------------|------------------|----------------|----------------------------------|-------------------------|--------------------|
| 15C-02916 | Regular fries | Burger King | Not applicable | Not applicable | UK | Newmarket | 362 |
| 15C-02917 | Chips | Café Fresco | Not applicable | Not applicable | UK | Cardiff | 273 |
| 15C-02918 | Chips | Canton Fish Bar | Not applicable | Not applicable | UK | Cardiff | 66 |
| 15C-02919 | Chips | Zero Plus Fish Bar | Not applicable | Not applicable | UK | Cardiff | 169 |
| 15C-02920 | Chips | City Restaurant | Not applicable | Not applicable | UK | Edinburgh | 81 |
| 15C-02921 | Chips | The Abbey | Not applicable | Not applicable | UK | Edinburgh | 145 |
| 15C-02922 | Chips | Marco's Fish Bar | Not applicable | Not applicable | UK | Birmingham | 41 |
| 15C-02923 | Chips | Newton Fish Bar | Not applicable | Not applicable | UK | Birmingham | 78 |
| 15C-02924 | Chips | Moto The Kitchen | Not applicable | Not applicable | UK | Wolverhampton | 167 |
| 15C-02925 | Regular fries | KFC | Not applicable | Not applicable | UK | Edinburgh | 179 |
| 15C-02926 | Chips | 21 Fish & Chips | Not applicable | Not applicable | UK | Congleton | 291 |
| 15C-02927 | Side chips | DV8 | Not applicable | Not applicable | UK | Congleton | 122 |
| 15C-02928 | Hand cut chips | The Trinity | Not applicable | Not applicable | UK | London | 268 |
| 15C-02929 | Large fries | McDonalds | Not applicable | Not applicable | UK | Cardiff | 115 |
| 15C-02930 | Chips | Perfect Fried Chicken | Not applicable | Not applicable | UK | London | 86 |
| 15C-02931 | Chips | Silver Lounge Café | Not applicable | Not applicable | UK | Larne | 124 |
| 15C-02932 | Chips | The Upper Crust | Not applicable | Not applicable | UK | Larne | 181 |
| 15C-02933 | Chips | Arcade Chip Shop | Not applicable | Not applicable | UK | Antrim | 77 |
| 15C-02934 | Chunky chips | Sainsbury's Café | Not applicable | Not applicable | UK | Cambridge | 207 |
| 15C-02935 | Chips | Khangs Fish & Chips | Not applicable | Not applicable | UK | Cambridge | 58 |

Category 2 Potato crisp from fresh potatoes – March 2014 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|--|-----------------------------|------------------|--|---|-------------------------|-----------------------|
| 14C-02156 | Sea salt & Balsamic vinegar hand cooked crisps | Marks & Spencer | 10/06/2014 | B 4 041 Variety HERMES | UK | Cambridge | 782 |
| 14C-02157 | Sea salt & Chardonnay wine vinegar flavour crisps | Co-op Truly Irresistible | 12 06 14 | 14 037 T3 | British potatoes Herefordshire, England | Glossop | 442 |
| 14C-02158 | Ready salted crisps - 6 pack | Tesco | 17 MAY 14 | Display until 10 MAY M7 S 4049 | UK | Newmarket | 605 |
| 14C-02159 | Sea salt & cyder vinegar crisps | JackPots | 10052014 | LOT 1092 | East Anglia | Cambridge | 404 |
| 14C-02160 | Cheddar & onion flavour ridge cut potato crisps | McCoy's | 24 05 14 | T 4044 F/W C F/W D | UK | Newmarket | 1069 |
| 14C-02161 | Lightly salted chips | Kettle Chips | 31 MAY 14 | Н В 4007 | UK | Glossop | 610 |
| 14C-02162 | Sea salted potato crisps - 6 pack | Seabrook | 21 JUN 14 | 4057 R2 | Yorkshire, England | Newmarket | 1093 |
| 14C-02163 | Simply salted potato crisps - 6 bags | Walkers Lights | 24 05 14 | GBL 187 062 | None declared | Newmarket | 329 |
| 14C-02164 | Hand cooked chips with sea salt | Burts | 05 08 2014 | Prod: 04 02 14 Field: Shot Cooked by: Saif | Devon, England | Newmarket | 1873 |
| 14C-02165 | Cheese & onion flavour crisps | Tayto | 14 JUN 14 | B1 14065 | None declared | Antrim | 1403 |

Category 2 Potato crisp from fresh potatoes – November / December 2014 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|--|-----------------------------|------------------|---|---|-------------------------|--------------------|
| 14C-02280 | Sea salt & Balsamic vinegar hand cooked crisps | Marks & Spencer | 03/02/2015 | B 4 279 Variety HERMES | UK | Cambridge | 688 |
| 14C-02281 | Sea salt & Chardonnay wine vinegar flavour crisps | Co-op Truly Irresistible | 17 02 2015 | 14 287 T4 COURAGE | British potatoes Herefordshire, England | Cambridge | 583 |
| 14C-02282 | Ready salted crisps - 16 pack | Tesco | 17 JAN 15 | Display until 10 JAN M10 S 4293 | UK | Cambridge | 745 |
| 14C-02283 | Sea salt & cyder vinegar crisps | JackPots | 31012015 | LOT 1126 | East Anglia | Cambridge | 126 |
| 14C-02284 | Cheddar & onion flavour ridge cut potato crisps | McCoy's | 10 01 15 | T 4275 F/W E | None declared | Cambridge | 553 |
| 14C-02285 | Lightly salted chips | Kettle Chips | 28 FEB 15 | H C 4 281 | UK | Cambridge | 1010 |
| 14C-02286 | Sea salted potato crisps - 6 pack | Seabrook | 24 JAN 15 | 4272 R1 | Yorkshire, England | Cambridge | 630 |
| 14C-02287 | Simply salted potato crisps - 6 bags | Walkers Lights | 03 01 15 | GBL 180 274 2449 | None declared | Cambridge | 203 |
| 14C-02288 | Hand cooked chips with sea salt | Burts | 21 04 2015 | Prod: 21 10 14 Field: Lodge 4 Cooked by: Sony | Devon, England | Roborough | 352 |
| 14C-02289 | Cheese & onion flavour crisps | Tayto | 31 JAN 15 | B1 14294 | None declared | Antrim | 623 |
| 15C-00013 | Ready salted potato crisps - 6 bags | Snackrite | 21 MAR 15 | F3 K4 345 | None declared | Cambridge | 673 |

Category 2 Potato crisp from fresh potatoes – March 2015 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|--|-----------------------------|------------------|--|---|-------------------------|--------------------|
| 15C-02763 | Sea salt & Balsamic vinegar hand cooked crisps | Marks & Spencer | 16/06/2015 | A 5 047 Variety HERMES | UK | Congleton | 1249 |
| 15C-02764 | Sea salt & Chardonnay wine vinegar flavour crisps | Co-op Truly Irresistible | 22 06 15 | 15 047 T3 Setanta | British potatoes Herefordshire, England | Cambridgeshire | 302 |
| 15C-02765 | Ready salted crisps - 6 pack | Tesco | 16 MAY 15 | Display until 09 MAY M8 S 5050 | UK | Newmarket | 634 |
| 15C-02766 | Sea salt & cyder vinegar crisps | JackPots | 28/03/2015 | LOT-1134 | East Anglia | Cambridge | 499 |
| 15C-02767 | Cheddar & onion flavour ridge cut potato crisps | McCoy's | 02 05 15 | T 5020 02281 FWF FWE | None declared | Newmarket | 483 |
| 15C-02768 | Lightly salted hand cooked potato chips | Kettle Chips | 27 JUN 15 | Н А 5 033 | UK | Cambridge | 1054 |
| 15C-02769 | Sea salted potato crisps - 6 pack | Seabrook | 30 MAY 15 | 5036 R2 | Yorkshire, England | Congleton | 1909 |
| 15C-02770 | Simply salted potato crisps - 6 bags | Walkers Lights | 09 05 15 | GBL 184 049 5300 | None declared | Congleton | 771 |
| 15C-02771 | Hand cooked chips with sea salt | Burts | 04 06 2015 | Prod: 04 12 14 Field: S. Valley 3 Cooked by: Chris | Devon, England | | 658 |
| 15C-02772 | Cheese & onion flavour crisps | Tayto | 25 APR 15 | B 15012 | None declared | Larne | 704 |
| 15C-02773 | Ready salted potato crisps - 6 bags | Snackrite | 23 MAY 15 | S M13 5040 | British potatoes | Congleton | 1595 |

Category 2 Potato crisp from fresh potatoes – November 2015 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|--|-----------------------------|------------------|--|---|-------------------------|--------------------|
| 15C-02936 | Sea salt & Balsamic vinegar hand cooked crisps | Marks & Spencer | 09/02/2016 | T 5286 Variety Daisy | UK | Cambridge | 446 |
| 15C-02937 | Sea salt & Chardonnay wine vinegar flavour crisps | Co-op Truly Irresistible | 17 02 2016 | 15 287 T1 COURAGE | British potatoes Herefordshire, England | Birmingham | 652 |
| 15C-02938 | Ready salted crisps - 6 pack | Tesco | 30 JAN 16 | S 5308 M8 | UK | Cambridge | 668 |
| 15C-02939 | Sea salt & cyder vinegar crisps | JackPots | 16 04 2016 | LOT 1184 Field: Park House Variety: Infinity | East Anglia | Cambridge | 504 |
| 15C-02940 | Cheddar & onion flavour ridge cut potato crisps | McCoy's | 19 12 15 | T 5252 F/W C 02281 | None declared | Newmarket | 280 |
| 15C-02941 | Lightly salted chips | Kettle Chips | 27 FEB 16 | D A 5 279 | UK | Cambridge | 553 |
| 15C-02942 | Sea salted potato crisps - 6 pack | Seabrook | 23 JAN 16 | 5272 R2 | Yorkshire, England | Cambridge | 357 |
| 15C-02943 | Simply salted potato crisps - 6 bags | Walkers Lights | 02 01 16 | GBL 188 286 5251 | None declared | Cambridge | 166 |
| 15C-02944 | Hand cooked chips with sea salt | Burts | 29 03 2016 | Prod: 29 09 15 Field: A Sarah Cooked by: Felix 4 | Devon, England | Roborough | 402 |
| 15C-02945 | Cheese & onion flavour crisps | Tayto | 30 JAN 16 | D5 15294 | Northern Ireland | Larne | 887 |
| 15C-02946 | Ready salted potato crisps - 6 bags | Snackrite | 30 JAN 16 | F3 K5 294 | None declared | Birmingham | 767 |

Category 2 Potato crisp from potato dough and potato-based crackers – 2014 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (μg/kg) |
|-------------|---|--------------------|------------------|-------------------|----------------------------|-------------------------|-----------------------|
| 14C-02321 | Pringles original savoury snack | Pringles | 22/11/15 | L 4235035710 2337 | Belgium | Cambridge | 140 |
| 14C-02322 | Teddy shaped potato snack | Pom-bear | 14/02/2015 | 3 4230 | None declared | Newmarket | 288 |
| 14C-02323 | Original salted potato rings | Hula Hoops | 10 01 2015 | YHFW1A 4255 | None declared | Newmarket | 88 |
| 14C-02324 | Soured cream & onion flavour party snax | Asda | 29 NOV 14 | K 4 246 22 | UK | Cambridge | 745 |
| 14C-02345 | Original potato chips | Popchips | 30/09/2015 | (1) 14273B | EU | Cambridge | 2429 |
| 14C-02346 | Cracked black pepper & salt popped potato chips | Marks & Spencer | 18/08/2015 | 14230C | UK | Cambridge | 2542 |

Category 2 Potato crisp from potato dough and potato-based crackers – 2014 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|---|------------|------------------|-------------------|----------------------------|-------------------------|-----------------------|
| 15C-02897 | Pringles original savoury snack | Pringles | 18/11/16 | L 5232036610 0853 | Poland | Cambridge | 151 |
| 15C-02898 | Teddy shaped potato snack | Pom-bear | 19 03 16 | 5 260 3 T | None declared | Cambridge | 455 |
| 15C-02899 | Original salted potato rings | Hula Hoops | 30 01 16 | YHFW1A 5275 | None declared | Cambridge | 452 |
| 15C-02900 | Soured cream & onion flavour party snax | Asda | 26 DEC 15 | 209 K 5 274 | UK | Cambridge | 1221 |
| 15C-02901 | Sea salt potato chips | Popchips | 17/06/16 | C F2 25 | EU | Cambridge | 1140 |
| 15C-02902 | Original pops | Walkers | 02 01 16 | GBS3R1229 6416 | None declared | Cambridge | 377 |

Category 3 Pre-cooked French fries, potato products for home cooking – March 2014 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|--------------------------------------|-------------------------------------|------------------|---------------|----------------------------|-------------------------|--------------------|
| 14C-02166 | Straight cut oven chips | Sainsbury's Be Good to Yourself | FEB 2016 | B3 4045 | Netherlands | Cambridge | 366 |
| 14C-02167 | Thin & crispy oven chips | Tesco | 03/2015 | C4 4 063 | Netherlands | Newmarket | 145 |
| 14C-02168 | Crispy French fries | McCain | 08 2015 | S 15022014 06 | None declared | Glossop | 1156 |
| 14C-02169 | Straight cut frying chips | Waitrose Essential | MAY2015 | L3330 04 13 | Belgium | Monmouth | 19 |
| 14C-02170 | Chunky chips | Tesco Finest | None declared | 84 C | UK | Newmarket | 289 |
| 14C-02171 | Crispy roast potatoes with goose fat | Sainsbury's Taste the Difference | None declared | BU4L4 | UK | Cambridge | 565 |
| 14C-02172 | Organic straight cut oven chips | Waitrose Organic | APR 2015 | C3276 4 | UK | Newmarket | 103 |
| 14C-02173 | Homestyle chips | Aunt Bessie's | JUL 2015 | NB 4 017 4 | UK | Buxton | 370 |
| 14C-02174 | Straight cut oven chips | Asda | 30/11/2014 | B43 335 | Netherlands | Cambridge | 104 |
| 14C-02175 | Crispy potatoes | Sainsbury's | NOV 2015 | B33324 | Netherlands | Cambridge | 1116 |
| 14C-02176 | Potato waffles - 10 | Birds Eye | 08 2015 | L4057UL124 | Not declared | Newmarket | 461 |
| 14C-02177 | Oven cook roast potatoes | Asda | 26 FEB 2015 | EPM C4057 2 | UK | Cambridge | 318 |
| 14C-02178 | Smiles | McCain | 07 2015 | W 30012014 02 | Not declared | Buxton | 92 |
| 14C-02179 | Micro chips | McCain | 11 2014 | P 18 02 2014 | Not declared | Newmarket | 311 |

Category 3 Pre-cooked French fries, potato products for home cooking – November 2014 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|--------------------------------------|------------------------------------|------------------|---------------|----------------------------|-------------------------|-----------------------|
| 14C-02290 | Straight cut oven chips | Sainsbury's Be Good to Yourself | SEP 2016 | B1 4274 | Netherlands | Cambridge | 175 |
| 14C-02291 | Thin & crispy oven chips | Tesco | 09/2015 | C4 4274 | Netherlands | Cambridge | 13 |
| 14C-02292 | Crispy French fries | McCain | 04 2016 | S 05102014 05 | None declared | Cambridge | 103 |
| 14C-02293 | Straight cut frying chips | Waitrose Essential | MAR2016 | L4266 04 23 | Belgium | Newmarket | 6 |
| 14C-02294 | Chunky chips | Tesco Finest | None declared | e4 D | UK | Cambridge | 77 |
| 14C-02295 | Crispy roast potatoes with goose fat | Sainsbury's Taste the Difference | None declared | BU4L2 | UK | Cambridge | 522 |
| 14C-02296 | Organic straight cut oven chips | Waitrose Organic | APR 2015 | C3276 6 | UK | Newmarket | 17 |
| 14C-02297 | Homestyle chips | Aunt Bessie's | FEB 2016 | NB 4 229 9 | UK | Cambridge | 138 |
| 14C-02298 | Straight cut oven chips | Asda | 22/09/2015 | B2 4267 | Netherlands | Cambridge | 15 |
| 14C-02299 | Crispy potatoes | Sainsbury's | OCT 2016 | B44281 | Netherlands | Cambridge | 91 |
| 14C-02300 | Potato waffles - 10 | Birds Eye | 04 2016 | L4276KL124 | Not declared | Cambridge | 170 |
| 14C-02301 | Oven cook roast potatoes | Asda | 30 SEP 2015 | EPM C4273 2 | UK | Cambridge | 303 |
| 14C-02302 | Smiles | McCain | 03 2016 | W 24092014 02 | Not declared | Cambridge | 23 |
| 14C-02303 | Micro chips | McCain | 07 2015 | P 13 10 2014 | British potatoes | Cambridge | 224 |
| 14C-02304 | Ready baked jackets (2) | McCain | 03 2015 | S12032014 | British potatoes | Cambridge | 142 |

Category 3 Pre-cooked French fries, potato products for home cooking – March 2015 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|--------------------------------------|-------------------------------------|------------------|---------------|----------------------------|-------------------------|--------------------|
| 15C-02774 | Straight cut oven chips | Sainsbury's Be Good to Yourself | JAN 2017 | B3 5026 | Netherlands | Cambridge | 215 |
| 15C-02775 | Thin & crispy oven chips | Tesco | 01/2016 | C3 5023 | Netherlands | Congleton | 44 |
| 15C-02776 | Crispy French fries | McCain | 08 2016 | S 21022015 09 | British potatoes | Congleton | 18 |
| 15C-02777 | Straight cut frying chips | Waitrose Essential | AUG 2016 | L5042 04 18 | None declared | Newmarket | 9 |
| 15C-02778 | Chunky chips | Tesco Finest | None declared | e4 D | UK | Congleton | 946 |
| 15C-02779 | Crispy roast potatoes with goose fat | Sainsbury's Taste the Difference | None declared | BU4L4 | UK | Cambridge | 1345 |
| 15C-02780 | Organic straight cut oven chips | Waitrose Duchy Organic | NOV 2015 | C4321 6 | None declared | Newmarket | 20 |
| 15C-02781 | Homestyle chips | Aunt Bessie's | JUL 2016 | NB 5 014 4 | UK | Cambridge | 374 |
| 15C-02782 | Straight cut oven chips | Asda | 22/01/2016 | B1 5 023 | Netherlands | Cambridge | 32 |
| 15C-02783 | Crispy potatoes | Sainsbury's | FEB 2017 | B 2 5042 | Netherlands | Cambridge | 319 |
| 15C-02784 | Potato waffles - 10 | Birds Eye | 08 2016 | L 5041FL124 | Not declared | Congleton | 45 |
| 15C-02785 | Oven cook roast potatoes | Asda | 23 FEB 2016 | EPM C5405 5 | UK | Cambridge | 194 |
| 15C-02786 | Smiles | McCain | 08 2016 | W 06022015 01 | Not declared | Congleton | 50 |
| 15C-02787 | Micro chips | McCain | 11 2015 | P 21 02 2015 | Not declared | Congleton | 394 |
| 15C-02788 | Ready baked jackets (4) | McCain | 01/2016 | W 27012015 | British potatoes | Congleton | 44 |

Category 3 Pre-cooked French fries, potato products for home cooking – November 2015 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|--------------------------------------|------------------------------------|------------------|---------------|----------------------------|-------------------------|-----------------------|
| 15C-02947 | Straight cut oven chips | Sainsbury's Be Good to Yourself | OCT 2017 | E45279 | Netherlands | Cambridge | 136 |
| 15C-02948 | Thin & crispy oven chips | Tesco | 08/2016 | C5 5 240 | Netherlands | Cambridge | 53 |
| 15C-02949 | Crispy French fries | McCain | 02 2017 | S 30082015 06 | None declared | Cambridge | 97 |
| 15C-02950 | Straight cut frying chips | Waitrose Essential | APR2017 | L5277 03 04 | None declared | Newmarket | 4 |
| 15C-02951 | Chunky chips | Tesco Finest | None declared | L5 X | UK | Cambridge | 489 |
| 15C-02952 | Crispy roast potatoes with goose fat | Sainsbury's Taste the Difference | None declared | BU4L6 | UK | Cambridge | 616 |
| 15C-02953 | Organic straight cut oven chips | Waitrose Duchy Organic | APR 2017 | C5278 8 | None declared | Newmarket | 60 |
| 15C-02954 | Homestyle chips | Aunt Bessie's | 03/2017 | C 85 256 | None declared | Cambridge | 103 |
| 15C-02955 | Straight cut oven chips | Asda | 01/08/2016 | E3 5 227 | Netherlands | Cambridge | 36 |
| 15C-02956 | Crispy potatoes | Asda | 22/10/2016 | B3 5 297 | Netherlands | Cambridge | 124 |
| 15C-02957 | Potato waffles - 10 | Birds Eye | 03 2017 | L5255ML124 | Not declared | Cambridge | 139 |
| 15C-02958 | Oven cook roast potatoes | Asda | 23 OCT 2016 | EPM C5296 4 | UK | Cambridge | 104 |
| 15C-02959 | Smiles | McCain | 04 2017 | W 14102015 03 | Not declared | Cambridge | 10 |
| 15C-02960 | Micro chips | McCain | JUL 2016 | S 17 10 15 0 | British potatoes | Cambridge | 333 |
| 15C-02961 | Ready baked jackets (4) | McCain | 09 2016 | W 04092015 | British potatoes | Cambridge | 66 |

Category 4 Soft bread - 2014 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|---|--------------------|------------------|----------------------|----------------------------|-------------------------|--------------------|
| 14C-02087 | Toastie thick sliced white bread | Warburtons | 13 MAR | 2 W ZN W BNC Z 15 | None declared | Buxton | 12 |
| 14C-02088 | Demi baguettes | Co-op | 10/03/2014 | None declared | None declared | Glossop | 8 |
| 14C-02089 | White bloomer | Greggs | None declared | None declared | None declared | Newmarket | 7 |
| 14C-02090 | Tiger bloomer | Tesco Bakery | 41712 | None declared | None declared | Newmarket | 11 |
| 14C-02091 | White finger roll - 6 pack | Tesco Bakery | 31 Mar | None declared | None declared | Newmarket | 7 |
| 14C-02092 | Wholemeal medium sliced bread | Brace's | 22 MAR | G 49 D 3 | None declared | Monmouth | 11 |
| 14C-02093 | Toasty pan white sliced bread - thick | Irwin's | 23 MAR | CN2 | None declared | Larne | 5 |
| 14C-02094 | Plain sliced white bread | Sunblest | 26 MAR | BE 54 079 | Northern Ireland | Larne | 29 |
| 14C-02095 | Harvest Pride white premium sliced bread | Linwoods | 26 MAR | C 424 | None declared | Ballynure | 6 |
| 14C-02096 | Nimble wholemeal sliced bread | Hovis | 12 MAR | X25AET | None declared | Buxton | 23 |
| 14C-02097 | Soya & linseed bread | Burgen | 20 MAR | HU 9 4 073 0840 | UK | Cambridge | 12 |
| 14C-02098 | 4 green olive ciabatta rolls | Marks & Spencer | 19/03/2014 | None declared | UK | Cambridge | 37 |
| 14C-02099 | Stoneground wholemeal medium sliced bread | Waitrose | 02 APR | FLBC05 | UK | Newmarket | 24 |
| 14C-02100 | Sunflower & barley bread | Vogel's | 30 MAR | A | None declared | Cambridge | 19 |
| 14C-02101 | Thick sliced soft white bread | Hovis | 30 MAR | X124 AT | None declared | Congleton | 4 |
| 14C-02102 | Wholemeal batch baked loaf | Allinson | 12 MAR | SH09 4 064 1927 | UK | Buxton | 35 |

Category 4 - 2014 samples, continued...

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|-------------------------------|----------------------------------|------------------|----------------------|----------------------------|-------------------------|-----------------------|
| 14C-02103 | Walnut cob | Sainsbury's Taste the Difference | 28 Mar | Display until 27 Mar | UK | Cambridge | 14 |
| 14C-02104 | Thick sliced soft white bread | Roberts Bakery | 30 MAR | FRS1 1A 083 2814R | None declared | Congleton | 15 |
| 14C-02105 | Burger buns | Asda | 31-03-14 | None declared | None declared | Cambridge | 5 |
| 14C-02106 | Soft white loaf - medium | Kingsmill | 20 MAR | ST10 073 0307 | UK | Cambridge | 5 |

Category 4 Soft bread - 2015 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (μg/kg) |
|-------------|---|----------------------------------|------------------|--------------------------|----------------------------|-------------------------|--------------------|
| 15C-02694 | Toastie thick sliced white bread | Warburtons | 26 FEB | (2) C T XU W BGB A 15 | None declared | Cambridge | 10 |
| 15C-02695 | Demi baguettes | Co-op | None declared | None declared | None declared | Cambridge | 5 |
| 15C-02696 | White bloomer | Greggs | None declared | None declared | None declared | Newmarket | 9 |
| 15C-02697 | Tiger bloomer | Tesco Bakery | 22 FEB | None declared | None declared | Cambridge | 9 |
| 15C-02698 | White finger roll - 6 pack | Tesco Bakery | 22 FEB | None declared | None declared | Cambridge | 6 |
| 15C-02699 | Wholemeal sliced bread | Brace's | 30 MAR | C11 D 4 | United Kingdom | Cardiff | 11 |
| 15C-02700 | Toasty pan white sliced bread - thick | Irwin's | 07 MAR | CN2 5 061 | None declared | Larne | 5 |
| 15C-02701 | Plain white bread | Sunblest | 09 MAR | BE6 5 062 1646 | Northern Ireland | Larne | 34 |
| 15C-02702 | Harvest Pride white premium sliced bread | Linwoods | 08 MAR | B 406 | None declared | Ballyclare | 6 |
| 15C-02703 | Wholemeal sliced bread | Hovis Nimble | 26 FEB | X121 FV | None declared | Cambridge | 15 |
| 15C-02704 | Soya & linseed bread | Burgen | 26 FEB | SK2 5 0501906 | UK | Cambridge | 8 |
| 15C-02705 | 4 green olive ciabatta rolls | Marks & Spencer | 23/02/2015 | None declared | UK | Newmarket | 39 |
| 15C-02706 | Stoneground wholemeal medium sliced bread | Waitrose | 25 FEB | FLBL12 | None declared | Newmarket | 24 |
| 15C-02707 | Sunflower & barley bread | Vogel's | 25 FEB | Е | None declared | Newmarket | 22 |
| 15C-02708 | Thick sliced soft white bread | Hovis | 07 MAR | X12 A AE | None declared | Cambridge | 10 |
| 15C-02709 | Wholemeal batch baked loaf | Allinson | 27 FEB | WBD3 5 051 19 33 | UK | Grantham | 38 |
| 15C-02710 | Walnut cob | Sainsbury's Taste the Difference | 03 Mar | Display until 02 Mar | UK | Cambridge | 14 |
| 15C-02711 | Thick sliced soft white bread | Roberts Bakery | 12 MAR | FRS4 4 U 065 2715R | None declared | Walsall | 10 |
| 15C-02712 | Burger big eat rolls | Asda | 26-02-15 | None declared | None declared | Grantham | 13 |

Category 4 - 2015 samples, continued...

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (μg/kg) |
|-------------|---|------------------------|------------------|---------------------|----------------------------|-------------------------|--------------------|
| 15C-02713 | Soft white loaf - medium | Kingsmill | 02 MAR | SH04 5 053 2058 | UK | Grantham | 4 |
| 15C-02714 | Brown bread with added wheat flakes - medium sliced | Hovis Granary | 27FEB | (X35) J | None declared | Cambridge | 136 |
| 15C-02715 | Thick cut malted grain loaf | Morrisons Signature | 10 MAR | FLBH07 | None declared | Congleton | 47 |
| 15C-02716 | Brown Bloomer - brown multigrain bread | Jackson's | 30 03 15 | X 7 XREI C A | Yorkshire, England | Cardiff | 46 |
| 15C-02717 | Seeded five seeds batch bread | Warburtons | 26 FEB | MD XU W A1 BA 14 | None declared | Cambridge | 20 |
| 15C-02718 | Organic rye bread with sunflower seeds | Schneider Brot | 16.05.2015 | D1160136AE | Germany | Grantham | 12 |

Category 5 Breakfast cereals (excluding porridge) - 2014 samples

| | | | Best before | | Daglarad aguntru | UK town where | Acrylamide | Furan (| (µg/kg) |
|-------------|---|-------------------------|----------------|----------------|----------------------------|---------------|------------|--------------|-------------|
| Sample code | Product description | Brand | date | Batch code | Declared country of origin | purchased | (μg/kg) | As purchased | As consumed |
| 14C-02112 | Multigrain flakes of wholegrain corn, spelt & barley | Rude Health | 25 11 14 | L 329 M | None declared | Cambridge | 94 | 11 | - |
| 14C-02113 | Organic whole wheat cereal biscuits | Weetabix Organic | 10/01/2015 | 14010 2 | England | Newmarket | 120 | <10 | - |
| 14C-02114 | Grape-nuts - wheat & barley cereal | Post | 13OCT14 | M21 | USA | Cambridge | 118 | 66 | 1 |
| 14C-02115 | Puffed wheat | The Good Grain Co. | 30NOV14 | 322 C 5 | None declared | Glossop | 541 | 263 | 1 |
| 14C-02116 | Bran flakes | Tesco | 08 NOV 2014 | P4 B1 40390953 | UK | Cambridge | 243 | 38 | 1 |
| 14C-02117 | Apricot wheats | Tesco | 20 OCT 2014 | L1 40200952 | UK | Newmarket | 41 | <10 | - |
| 14C-02118 | Wholegrain bran flakes | Sainsbury's | 13 FEB 2015 | P4 B2 40440953 | UK | Cambridge | 158 | 37 | - |
| 14C-02119 | Cornflakes | Kellogg's | 04 01 15 | 04 MC | None declared | Cambridge | 74 | 43 | - |
| 14C-02120 | Shreddies - whole wheat malted cereal | Nestlé | 31.10.2014 | 40170952 L3 | None declared | Glossop | 259 | 24 | 1 |
| 14C-02121 | Puffed wheat | Sugar Puffs | 31DEC14 | 337 C 8 | None declared | Buxton | 328 | 162 | - |
| 14C-02122 | Whole wheat cereal biscuits | Morrisons | 04/03/2015 | 4063 2 | Not applicable | Congleton | 168 | 11 | - |
| 14C-02123 | Frosted wheats - shredded wholewheat with sugar topping | Kellogg's | 08 11 14 | 31 MC | None declared | Monmouth | 131 | 10 | ı |
| 14C-02124 | Shredded wheat - wholegrain wheat cereal biscuits | Nestlé | 31.11.2014 | 40420952 G | None declared | Buxton | 122 | 10 | ı |
| 14C-02125 | Wheat biscuits | Tesco Everyday Value | 22/02/2015 | UK4 | UK | Cambridge | 137 | 10 | - |
| 14C-02126 | Golden puffs | Harvest Morn | 01.02.2015 | L14-00568 | None declared | Cambridge | 414 | 86 | - |
| 14C-02127 | Malted wheaties | Asda | 10/03/2015 | 4069 A | UK | Cambridge | 98 | 15 | - |

Category 5 - 2014 samples, continued...

| | | | Best before | | Declared country | UK town where | Acrylamide | Furan (| (µg/kg) |
|-------------|----------------------------------|-----------------------|----------------|----------------|---|---------------|------------|-----------|----------|
| Sample code | Product description | Brand | date | Batch code | of origin | purchased | (µg/kg) | As | As |
| | | | uate | | or origin | purchased | (µg/kg) | purchased | consumed |
| 14C-02128 | Crunchy bran - high fibre cereal | Weetabix | 10/02/2015 | 4041 9 | England | Cambridge | 104 | 43 | = |
| 14C-02129 | Organic bran flakes | Tree of Life | Oct 2014 | 4013 C4 | Packed in the UK | Cambridge | 182 | 21 | - |
| 14C-02130 | Wheat & wheat bran flakes | Со-ор | 09 OCT 2014 | 40090953 P4 B1 | UK using British wheat & wheat bran | Glossop | 190 | 28 | - |
| 14C-02131 | Wholewheat biscuits | Waitrose Essential | 10/02/2015 | 4041 2 | UK | Newmarket | 172 | 12 | - |
| 14C-02132 | Fig & cranberry granola | The Food Doctor | 10 09 2014 | 3344 | UK | Newmarket | 81 | 10 | - |
| 14C-02133 | 3 seed & oat granola | Marks & Spencer | 06/2014 | 3345 | UK | Monmouth | 58 | <10 | - |
| 14C-02134 | Rice krispies | Kellogg's | 25 02 15 | 44 MC | None declared | Cambridge | - | 10 | - |
| 14C-02135 | Rice snaps | Tesco | 05 NOV 14 | 40360953 | UK | Antrim | - | 19 | - |

Category 5 Breakfast cereals (excluding porridge) - 2015 samples

| | | | Best before | | Declared country of | UK town where | Acrylamide | Furan (| (µg/kg) |
|-------------|--|-------------------------|-------------|-------------------|---------------------|---------------|------------|--------------|-------------|
| Sample code | Product description | Brand | date | Batch code | origin | purchased | (μg/kg) | As purchased | As consumed |
| 15C-02719 | Honey multigrain flakes of wholegrain corn, spelt & barley | Rude Health | 12 12 15 | L 346 M | None declared | Cambridge | 124 | 16 | - |
| 15C-02720 | Organic whole wheat cereal biscuits | Weetabix Organic | 30/01/2016 | 15030 | None declared | Newmarket | 94 | <10 | - |
| 15C-02721 | Grape-nuts - wheat & malted barley cereal | Post | 12AUG15 | M21 | USA | Grantham | 146 | 69 | - |
| 15C-02722 | Puffed wheat | The Good Grain Co. | 30NOV15 | 324 B 5 | None declared | Grantham | 484 | 382 | - |
| 15C-02723 | Bran flakes | Tesco | 10/2015 | P4 B2 50270953 | UK | Nottingham | 156 | 21 | - |
| 15C-02724 | Apricot wheats | Tesco | 09/2015 | L1 43520952 | UK | Cambridge | 21 | <10 | - |
| 15C-02725 | Wholegrain bran flakes | Sainsbury's | 01/2016 | P4 B2 50300953 | UK | Cambridge | 177 | 29 | - |
| 15C-02726 | Cornflakes | Kellogg's | 11 01 16 | 04 MC | None declared | Cambridge | 77 | 45 | - |
| 15C-02727 | Shreddies - whole wheat malted cereal | Nestlé | 11/2015 | 50390952 L3 | None declared | Congleton | 111 | 18 | - |
| 15C-02728 | Puffed wheat | Sugar Puffs | 31 JAN 16 | 007 A 8 | None declared | Cambridge | 232 | 207 | - |
| 15C-02729 | Whole wheat cereal biscuits | Morrisons | 01/02/2016 | 5032 1 | UK | Cambridge | 127 | 19 | - |
| 15C-02730 | Frosted wheats - shredded wholewheat with sugar topping | Kellogg's | 18 12 15 | 31 MC | None declared | Cambridge | 128 | 12 | - |
| 15C-02731 | Shredded wheat - wholegrain wheat cereal biscuits | Nestlé | 10/2015 | 50200952 G | None declared | Long Eaton | 104 | 14 | - |
| 15C-02732 | Wheat biscuits | Tesco Everyday Value | 09/01/2016 | None declared | UK | Nottingham | 109 | 16 | - |
| 15C-02733 | Golden puffs | Harvest Morn | 10.01.2016 | 15016 AEF | None declared | Cambridge | 399 | 134 | - |
| 15C-02734 | Malted wheaties | Asda | 08/02/2016 | 5039 A | UK | Grantham | 104 | 18 | - |

Category 5- 2015 samples, continued...

| | | | Best before | | Declared country of | UK town where | Acrylamide | As | μg/kg) |
|-------------|----------------------------------|--------------|-------------|-------------|---------------------|---------------|------------|-----------|----------|
| Sample code | Product description | Brand | date | Batch code | origin | purchased | (µg/kg) | As | As |
| | | | uate | | origin | purchased | (µg/kg) | purchased | consumed |
| 15C-02735 | Crunchy bran - high fibre cereal | Weetabix | 12/01/2016 | 5012 9 | None declared | Grantham | 106 | 52 | - |
| 15C-02736 | Organic bran flakes | Tree of Life | 24/10/15 | 53612 DD2 | Produce of UK | Cambridge | 44 | 12 | - |
| 15C-02737 | Wheat & wheat bran flakes | Colon | 10/2015 | 50230953 P4 | UK using British | Long Eaton | 151 | 25 | |
| 13C-02/37 | wheat & wheat brain flakes | Co-op | 10/2013 | B2 | wheat & wheat bran | Long Eaton | 131 | 23 | - |
| 15C-02738 | Wholewheat biscuits | Waitrose | 30/01/16 | 5030 1 | None declared | Newmarket | 160 | 15 | |
| 13C-02736 | wholewheat discults | Essential | 30/01/10 | 3030 1 | None declared | Newmarket | 100 | 15 | - |
| 15C-02739 | Fig & cranberry granola | The Food | 19 01 16 | 5019 | UK | Newmarket | 89 | <10 | |
| 13C-02739 | rig & cranberry granola | Doctor | 19 01 10 | 3019 | UK | Newmarket | 09 | <10 | - |
| 15C-02740 | 3 seed & oat granola | Marks & | 06/2015 | 4356 | UK | Newmarket | 69 | <10 | |
| 13C-02740 | 3 seed & oat granola | Spencer | 00/2013 | 4330 | UK | Newmarket | 09 | <10 | - |
| 15C-02741 | Rice krispies | Kellogg's | 18 01 16 | 46 MC | None declared | Cambridge | - | 21 | - |
| 15C-02742 | Rice snaps | Tesco | 10/2015 | 50210953 | UK | Nottingham | - | 56 | - |

Category 6 Biscuits, crackers, crisp bread and similar (excluding pastry and cake) - 2014 samples

| | | | Best before | | Declared | UK town where | Acrylamide | Furan (| μg/kg) |
|-------------|--|--------------------------|-------------|----------------------------|-------------------|---------------|------------|--------------|-------------|
| Sample code | Product description | Brand | date | Batch code | country of origin | purchased | (μg/kg) | As purchased | As consumed |
| 14C-02180 | Cream crackers | Waitrose Essential | 03 JAN 15 | 4 095 BC | UK | Newmarket | 96 | 43 | - |
| 14C-02181 | Organic wholewheat digestives | Doves Farm Organic | 09.NOV.14 | 4 090 | English wheat | Newmarket | 135 | <10 | - |
| 14C-02182 | Dark rye crispbread | Ryvita | 29-01-2015 | 1 4120 | Dorset | Newmarket | 197 | 65 | - |
| 14C-02183 | Ginger biscuits | Fox's Crinkles | 20 12 14 | BS | None declared | Newmarket | 1056 | 10 | - |
| 14C-02184 | Rich tea biscuits | Asda | 01 NOV 14 | T2 4 113 | UK | Cambridge | 395 | 11 | - |
| 14C-02185 | Crunchy ginger biscuits | McVitie's Ginger Nuts | 11 10 14 | C 4093 2 | None declared | Newmarket | 220 | 44 | - |
| 14C-02186 | Salted savoury snack biscuits | TUC Original | 08/11/14 | 4 098 1A | UK | Newmarket | 27 | 17 | - |
| 14C-02187 | Ginger nut biscuits | Tesco | 25 10 14 | C 4105 1 | UK | Newmarket | 155 | 52 | - |
| 14C-02188 | Cream crackers | Tesco | 20 DEC 14 | 4 097 BA | UK | Newmarket | 90 | 39 | - |
| 14C-02189 | Extra wheatgerm crackers | Hovis | 15 11 14 | 4061 C | UK | Newmarket | 317 | <10 | - |
| 14C-02190 | High bake water biscuits | Sainsbury's | 08 11 14 | C 4121 2 | UK | Cambridge | 256 | 104 | - |
| 14C-02191 | Crispy wheat & rye crackers | McVitie's Krackawheat | 25 OCT 14 | T2 D | UK | Newmarket | 544 | 106 | - |
| 14C-02192 | Malted milk biscuits | Marks & Spencer | 17/12/2014 | 4 099 | UK | Cambridge | 245 | <10 | - |
| 14C-02193 | Original thin sourdough rye crispbread | Finn Crisp | 06032015 | Production date: 06032014/ | Finland | Newmarket | 107 | 95 | - |

Category 6 - 2014 samples, continued...

| | | | Best before | | Declared | UK town where | Acrylamide | Furan (| μg/kg) |
|-------------|-------------------------------------|------------------------|----------------|---------------|-------------------|---------------|------------|--------------|-------------|
| Sample code | Product description | Brand | date | Batch code | country of origin | purchased | (µg/kg) | As purchased | As consumed |
| 14C-02194 | Flatbreads - mixed seeds | Jacob's | 25 10 14 | C 4105 1 | UK | Newmarket | 407 | 135 | - |
| 14C-02195 | Shortbread fingers | Paterson's | JAN 2015 | L14024 | None declared | Newmarket | 30 | <10 | - |
| 14C-02196 | Scandinavian bran crispbread | Slimming World | 06112016 | None declared | Norway | Newmarket | 327 | 11 | - |
| 14C-02197 | Cream crackers | Jacob's | 25.10.14 | 4 089 BC | UK | Newmarket | 98 | 64 | - |
| 14C-02198 | Butter crisps | Jules Destrooper | 31/05/2015 | SL164543 | Belgium | Cambridge | 169 | <10 | - |
| 14C-02199 | Rough oatcakes | Nairn's Oatcakes | 08 OCT 2014 | 1444 C2 | Scotland | Newmarket | 247 | 33 | - |
| 14C-02325 | 30 mini gingerbread men mini bites | Asda | 30/12/14 | 4 274 (2) | UK | Cambridge | 1324 | <10 | - |
| 14C-02326 | Gingerbread biscuit - Peppa Pig | Astley Baker Davies | 42038 | 4 279 | None declared | Newmarket | 360 | <10 | - |
| 14C-02327 | 5 decorate your own gingerbread men | Tesco | 26/12/14 | 4 238 | UK | Cambridge | 716 | <10 | - |
| 14C-02328 | 12 mini gingerbread men | Marks & Spencer | 07/01/15 | L4217 C | UK | Cambridge | 812 | <10 | - |

Category 6 Biscuits, crackers, crisp bread and similar (excluding pastry and cake) - 2015 samples

| | | | Best before | | Declared country of | UK town where | Acrylamide | Furan | (µg/kg) |
|-------------|---|--------------------------|----------------|----------------------------|---|---------------|------------|-----------|----------|
| Sample code | Product description | Brand | date | Batch code | origin | purchased | (µg/kg) | As | As |
| | | | | | | 1 | | purchased | consumed |
| 15C-02789 | Cream crackers | Waitrose Essential | 06 FEB 16 | 5 124 BC | None declared | Newmarket | 86 | 54 | - |
| 15C-02790 | Organic digestive biscuits | Doves Farm | 01.NOV.15 | 5 084 | Ingredients from more than one country. Baked in the UK | Newmarket | 123 | <10 | - |
| 15C-02791 | Dark rye crispbread | Ryvita | 21-01-2016 | 1 5112 | Dorset | Cambridge | 252 | 167 | - |
| 15C-02792 | Stem ginger biscuits | Fox's Crinkle Crunch | 30 01 16 | DS | None declared | Cambridge | 1055 | <10 | - |
| 15C-02793 | Rich tea biscuits | Asda | 31 OCT 15 | T2 5112 | UK | Cambridge | 322 | 15 | - |
| 15C-02794 | Crunchy ginger biscuits | McVitie's Ginger Nuts | 14 11 15 | C 5128 2 | None declared | Cambridge | 200 | 42 | - |
| 15C-02795 | Salted savoury snack biscuits | TUC Original | 05/12/15 | 5 126 1A | None declared | Cambridge | 59 | 23 | - |
| 15C-02796 | Ginger nut biscuits | Tesco | 14 11 15 | C 5125 1 | UK | Cambridge | 177 | 45 | - |
| 15C-02797 | Cream crackers | Tesco | 09 JAN 16 | 5 122 BB | UK | Cambridge | 71 | 49 | - |
| 15C-02798 | Extra wheatgerm crackers | Hovis | 07 11 15 | 5056 C | None declared | Cambridge | 349 | 14 | - |
| 15C-02799 | High bake water biscuits | Sainsbury's | 07 11 15 | C 5116 1 | UK | Cambridge | 583 | 152 | - |
| 15C-02800 | Wheat & rye crackers | Jacob's Krackawheat | 07 NOV 15 | T1A | None declared | Cambridge | 167 | 53 | - |
| 15C-02801 | Malted milk biscuits | Marks & Spencer | 04/11/2015 | 5 057 | UK | Newmarket | 287 | <10 | - |
| 15C-02802 | Original thin sourdough rye crispbread, fermented | Finn Crisp | 15012016 | Production date: 15012015/ | Finland | Newmarket | 40 | 49 | - |
| 15C-02803 | Flatbreads - mixed seeds | Jacob's | 05 09 15 | C 5058 1 | None declared | Cambridge | 265 | 52 | - |
| 15C-02804 | Shortbread fingers | Paterson's | APR 2016 | L15110 | None declared | Cambridge | 33 | <10 | - |
| 15C-02805 | Scandinavian bran crispbread | GG Slimming World | 09122017 | None declared | Norway | Newmarket | 104 | 25 | - |
| 15C-02806 | Cream crackers | Jacob's | 03.10.15 | 5 072 BC | None declared | Cambridge | 116 | 66 | - |
| 15C-02807 | Butter crisps | Jules Destrooper | 08/05/2016 | SL187205 | Belgium | Newmarket | 103 | <10 | - |
| 15C-02808 | Rough oatcakes | Nairn's | 11 NOV 2015 | 1945 C2 | Scotland | Cambridge | 110 | 13 | - |

Category 6 - 2015 samples, continued

| | | | Best before | | Declared country of | UK town where | Acrylamide | Furan (| (µg/kg) |
|-------------|--|------------------------------------|-------------|------------|---------------------|---------------|------------|--------------|-------------|
| Sample code | Product description | Brand | date | Batch code | origin | purchased | (µg/kg) | As purchased | As consumed |
| 15C-02809 | 30 mini gingerbread men mini bites | Asda | 06/08/15 | 5 128 (2) | UK | Cambridge | 129 | 10 | - |
| 15C-02810 | Gingerbread biscuit - Peppa Pig | Astley Baker Davies | 08/08/2015 | 5100 | None declared | Newmarket | 26 | <10 | - |
| 15C-02811 | 5 decorate your own gingerbread men | Tesco | 25/07/15 | 5 084 | UK | Cambridge | 60 | <10 | - |
| 15C-02812 | 12 mini gingerbread men | Marks & Spencer | 16/09/2015 | L5104 C | UK | Cambridge | 267 | <10 | - |
| 15C-02813 | Biscuits with wholegrains - honey & live yoghurt filling | Belvita Breakfast Yogurt Crunch | 10.2015 | 113 | None declared | Newmarket | 131 | <10 | - |
| 15C-02814 | Sandwich biscuits - raspberry & yogurt | McVitie's Breakfast | 10/11/15 | S15090 | None declared | Cambridge | 202 | <10 | - |
| 15C-02815 | Cranberry & raspberry breakfast biscuits | Marks & Spencer | 25/11/2015 | F | Scotland | Cambridge | 2576 | 15 | - |
| 15C-02816 | Double fan wafers | Carousel | 31 03 17 | L5075 | UK | Cambridge | 203 | 21 | - |
| 15C-02817 | Fan wafers | Asda | APR 16 | 5111 G11X | UK | Cambridge | 101 | <10 | - |
| 15C-02818 | Ice cream and dessert wafers | Askey's | OCT 16 | 5098G10 X | UK | Cambridge | 776 | 105 | - |

Category 7 Coffee and coffee substitutes - 2014 samples

| | | | Best before | | Declared | UK town | Acrylamide | Furan (| |
|-------------|--|--|------------------|--------------------------------------|----------------------------------|--------------------|------------|--------------|-------------|
| Sample code | Product description | Brand | date | Batch code | country of origin | where purchased | (µg/kg) | As purchased | As consumed |
| 14C-02200 | Coffee one-cup bags | Lyons | NOV 15 | 4129 | None declared | Cambridge | 264 | 3155 | 78 |
| 14C-02201 | Espresso roasted & ground coffee | Waitrose | FEB 15 | 14035 | Italy | Newmarket | 239 | 2968 | 10 |
| 14C-02202 | Guatemala Arabica ground coffee | Percol | NOV 2015 | L36 4131 | Guatemala | Newmarket | 224 | 1786 | 66 |
| 14C-02203 | Gajah mountain, Sumatra cafetiere grind coffee | Union Hand- Roasted Coffee | None declared | Roasted & packed by hand 09 JUN 2014 | Sumatra | London | 220 | 3630 | 127 |
| 14C-02204 | Java Sumatra roast & ground coffee | Tesco Finest | MAY 2015 | 4147 B 4 | Indonesia Packed in the UK | Cambridge | 271 | 2938 | 114 |
| 14C-02205 | Colombian Fairtrade coffee beans | Sainsbury's Taste the Difference | APR 2015 | 4 135 A1 | Columbia Packed in the UK | Cambridge | 219 | 4086 | 98 |
| 14C-02206 | Colombian Fairtrade ground coffee | Marks & Spencer | 04 2015 | 4092 51 | Colombia Packed in the UK | Cambridge | 183 | 3205 | 104 |
| 14C-02207 | Monsoon Malabar coffee beans | Whittard of Chelsea | None declared | None declared | India | Cambridge | 157 | 5009 | 137 |
| 14C-02208 | Freeze dried soluble coffee | Nescafé Gold Blend | 05 2016 | 40381080BC | None declared | Cambridge | 741 | 1296 | 9 |
| 14C-02209 | Freeze dried decaffeinated soluble coffee | Nescafé Gold Blend Decaff | 06 2016 | 40871080BA | None declared | Cambridge | 868 | 1255 | 9 |
| 14C-02210 | Freeze dried instant coffee | Kenco | APR 16 | L4106 | None declared | Cambridge | 629 | 122 | 1 |
| 14C-02211 | Freeze dried decaffeinated instant coffee | Kenco Decaff | MAR 16 | L04085 | None declared | Cambridge | 903 | 294 | 2 |
| 14C-02212 | Freeze dried instant coffee | Carte Noire | 04/16 | L4114 | UK | Cambridge | 838 | 504 | 4 |

Category 7 - 2014 samples, continued...

| | | | Best before | | Declared | UK town | Acrylamide | Furan (| (µg/kg) |
|-------------|---|--------------------------|-----------------|------------|-------------------|--------------------|------------|--------------|-------------|
| Sample code | Product description | Brand | date | Batch code | country of origin | where purchased | (µg/kg) | As purchased | As consumed |
| 14C-02213 | Freeze dried decaffeinated instant coffee | Carte Noire Decaff | 05/16 | L4132 | UK | Cambridge | 940 | 465 | 3 |
| 14C-02214 | Chicory & coffee essence | Camp | 24 02 16 | L4065 | EU | Cambridge | 155 | 43 | <1 |
| 14C-02215 | Instant dandelion coffee compound | Symingtons | NOV 2015 | BN 105651 | None declared | Cambridge | 7 | <40 | <1 |
| 14C-02216 | Organic grain coffee substitute | Lima Yannoh Instant | 10.12.2015 | L13088 | Switzerland | Cambridge | 665 | 159 | 2 |
| 14C-02217 | Guarana-based coffee alternative | Whole Earth Wake Up | JANUARY 2016 | L4016 | Italy | Cambridge | 310 | 231 | 3 |
| 14C-02218 | Instant cereal drink | Barley Cup Original | 01.10.2015 | 3402A | Poland | Cambridge | 896 | 44 | <1 |
| 14C-02219 | Instant grain beverage | Biona Organic Biomalt | 01-17 | L4023 | None declared | Daventry | 370 | 42 | <1 |

Category 7 Coffee and coffee substitutes - 2015 samples

| | | | Best before | | Declared country | UK town where | Acrylamide | Furan (| μg/kg) |
|-------------|--|-------------------------------------|------------------|--------------------------------------|----------------------------------|---------------|------------|-----------|----------|
| Sample code | Product description | Brand | date | Batch code | of origin | purchased | (µg/kg) | As | As |
| | | | | | <u> </u> | | | purchased | consumed |
| 15C-02819 | Coffee bags | Lyons | NOV 2016 | 5131 | None declared | Cambridge | 205 | 2976 | 53 |
| 15C-02820 | Espresso roasted & ground coffee | Waitrose | MAY 16 | 15149 | Italy | Newmarket | 147 | 3547 | 25 |
| 15C-02821 | Guatemala Arabica ground coffee | Percol | 08.2016 | L33 5042 | Guatemala | Newmarket | 128 | 1767 | 73 |
| 15C-02822 | Gajah mountain, Sumatra cafetiere grind coffee | Union Hand- Roasted Coffee | None declared | Roasted & packed by hand 11 JUN 2015 | Sumatra | London | 172 | 5242 | 197 |
| 15C-02823 | Java Sumatra roast & ground coffee | Tesco Finest | APR 2016 | 5 134 A 4 | Indonesia Packed in the UK | Cambridge | 235 | 3003 | 135 |
| 15C-02824 | Colombian Fairtrade coffee beans | Sainsbury's Taste the Difference | MAR 2016 | 5 078 B1 | Columbia Packed in the UK | Cambridge | 172 | 4871 | 181 |
| 15C-02825 | Colombian ground coffee | Marks & Spencer | 03 2016 | 5078 41 | Colombia Packed in the UK | Cambridge | 146 | 3516 | 130 |
| 15C-02826 | Monsoon Malabar Indian coffee beans | Whittard of Chelsea | None declared | None declared | India | Cambridge | 137 | 3434 | 160 |
| 15C-02827 | Freeze dried soluble coffee | Nescafé Gold Blend | 05 2017 | 51261092B | None declared | Cambridge | 574 | 615 | 5 |
| 15C-02828 | Freeze dried decaffeinated soluble coffee | Nescafé Gold Blend Decaff | 05.2017 | 5125 1092 1 | None declared | Cambridge | 649 | 1329 | 10 |
| 15C-02829 | Freeze dried instant coffee | Kenco | FEB 17 | L5037 | None declared | Cambridge | 579 | 156 | 2 |
| 15C-02830 | Freeze dried decaffeinated instant coffee | Kenco Decaff | MAR 17 | L5089 | None declared | Cambridge | 742 | 414 | 4 |
| 15C-02831 | Freeze dried instant coffee | Carte Noire | 05/17 | L5126 | UK | Cambridge | 591 | 444 | 4 |
| 15C-02832 | Freeze dried decaffeinated instant coffee | Carte Noire Decaff | 05/17 | L5135 | UK | Cambridge | 637 | 378 | 4 |

Category 7 - 2015 samples, continued...

| | | | Best before | | Declared country of | UK town where | Acrylamide | Furan (μg/kg) | |
|-------------|-----------------------------------|--------------------------|-------------|--------------|---------------------|---------------|------------|---------------|-------------|
| Sample code | Product description | Brand | date | Batch code | origin | purchased | (µg/kg) | As purchased | As consumed |
| 15C-02833 | Chicory & coffee essence | Camp | 06 04 17 | L5107 | EU | Cambridge | 247 | 41 | <1 |
| 15C-02834 | Instant dandelion coffee compound | Symingtons | DEC 2016 | BN 109890 | None declared | Cambridge | 25 | <40 | <1 |
| 15C-02835 | Organic grain coffee substitute | Lima Yannoh Instant | 25.02.2017 | L15014 | Switzerland | Cambridge | 1087 | 133 | 2 |
| 15C-02836 | Guarana-based coffee alternative | Whole Earth Wake Up | APRIL 2016 | L4120 | Italy | Cambridge | 323 | 258 | 4 |
| 15C-02837 | Instant cereal drink | Barley Cup Original | 09.10.2017 | 4414A | None declared | Cambridge | 862 | 67 | 1 |
| 15C-02838 | Organic instant cereal drink | Biona Organic Biomalt | 03-18 | L5090 | None declared | Daventry | 573 | 53 | 1 |

Category 8 Baby foods, other than processed cereal based foods - 2014 samples

| | | | Best before | | Declared | UK town where | Acrylamide | Furan (| μg/kg) |
|-------------|--|---------------------------|-------------|---|----------------------|---------------|------------|--------------|-------------|
| Sample code | Product description | Brand | date | Batch code | country of origin | purchased | (µg/kg) | As purchased | As consumed |
| 14C-02220 | Organic tender carrots & potatoes | Hipp Organic | 12/15 | L151917 DE P11/13 257764 257826 257832 257836 257858 | Germany | Newmarket | 9 | 19 | - |
| 14C-02221 | Creamy parsnip and potato | Cow & Gate | 29.04.2016 | 120301 A/116,00 | EU | Cambridge | 7 | 54 | - |
| 14C-02222 | Sweet potato & carrot | Heinz Mum's Own Recipe | 01/2015 | 3277 8372 C | Italy | Cambridge | 14 | 39 | - |
| 14C-02223 | Organic parsnip, potato & turkey casserole | Hipp Organic | 10/15 | L158561 DE P03/14 047362 047408 047430 047447 | Germany | Newmarket | 8 | 18 | - |
| 14C-02224 | Sweet vegetables and pasta stars | Heinz Mum's Own Recipe | 07/2015 | 4095 8411 C | Italy | Cambridge | 5 | 30 | - |
| 14C-02225 | Organic carrots, apples & parsnips | Ella's Kitchen | JUL 15 | 717221326 ES-ECO-019-CT | EU | Cambridge | 7 | 6 | - |
| 14C-02226 | Organic pasta with cheesy vegetables | Boots Baby Organic | 31.10.2015 | L161880 DE Nr.016588 Nr.016601 Nr.016614 Nr.016624 | Germany | Cambridge | 3 | 12 | - |
| 14C-02227 | Vegetable and chicken casserole | Heinz Mum's Own Recipe | 07/2015 | 4030 8356 C | Italy | Cambridge | 10 | 45 | - |
| 14C-02228 | Organic mixed vegetable medley | Hipp Organic | 07/15 | L154778 DE P01/14 090586 090597 090601 090619 090641 | Germany | Cambridge | 13 | 30 | - |
| 14C-02229 | Spaghetti bolognese | Heinz Little Kidz | 06.2015 | None declared | EU | Barkingside | 20 | 28 | - |

Category 8 - 2014 samples, continued...

| | | | Best before | | Declared | UK town where | Acrylamide | Furan (| (µg/kg) |
|-------------|---|------------------------------------|-------------|---|-------------------|---------------|------------|--------------|-------------|
| Sample code | Product description | Brand | date | Batch code | country of origin | purchased | (µg/kg) | As purchased | As consumed |
| 14C-02230 | Spaghetti bolognese | Cow & Gate Little Steamed Meals | 24/04/2015 | AT | EU | Barkingside | 27 | 18 | - |
| 14C-02231 | Organic lasagne | Hipp Organic | 25.01.15 | L158298 | Austria | Cambridge | 6 | 10 | - |
| 14C-02232 | Organic tomato & leek pasta | Hipp Organic | 28/05/2015 | V G- | France | Newmarket | 3 | 10 | - |
| 14C-02233 | Organic vegetable bake with lentils | Ella's Kitchen | 03/2015 | V G-4045 | EU | Newmarket | 12 | 54 | - |
| 14C-02234 | Creamed carrot & potato | Cow & Gate | 26.05.2016 | 120298 A/08989.02/ | EU | Cambridge | 17 | 76 | - |
| 14C-02235 | Organic Italian ragu with tomato, beef and ditalini pasta | Plum Tots Little Foodies | 26/02/2015 | None declared | France | Newmarket | 16 | 24 | - |
| 14C-02236 | Organic beef stew with spuds | Ella's Kitchen | NOV 2014 | L4057 B2 LA | EU | Barkingside | 9 | 30 | - |
| 14C-02237 | Organic carrot & parsnip | Boots Baby Organic | 31.01.2015 | L144226 DE Nr.009125 Nr.009142 Nr.009165 Nr.009193 Nr.009246 | Germany | Cambridge | 14 | 41 | - |
| 14C-02238 | Succulent pork casserole | Cow & Gate | 20.05.2016 | 122241 A/08990.03 | EU | Cambridge | 22 | 36 | = |
| 14C-02239 | Chicken and parsnip bake | Heinz Mum's Own Recipe | 02/2015 | 3310 8373 C | Italy | Cambridge | 7 | 31 | - |

Category 8 Baby foods, other than processed cereal based foods - 2015 samples

| | | | Best before | | Declared | UK town where | Acrylamide | Furan (| (µg/kg) |
|-------------|--|------------------------------------|-------------|---|-------------------|---------------|------------|--------------|-------------|
| Sample code | Product description | Brand | date | Batch code | country of origin | purchased | (µg/kg) | As purchased | As consumed |
| 15C-02839 | Organic tender carrots & potatoes | Hipp Organic | 02/17 | L174546 DE P01/15, 013879, 013960, 013933, 014051, 014130 | Germany | Harlow | 14 | 34 | - |
| 15C-02840 | Creamy parsnip and potato | Cow & Gate | 15.12.2016 | 120301 A/116,00 | EU | Cambridge | 10 | 66 | - |
| 15C-02841 | Carrot & sweet potato mash | Heinz Mum's Own | 05/2016 | 4346 0441 C | None declared | Cambridge | 6 | 28 | - |
| 15C-02842 | Organic parsnip, potato & turkey casserole | Hipp Organic | 08/16 | L174642 DE P01/15, 066891, 066894, 066913, 066948 | Germany | Cambridge | 12 | 20 | - |
| 15C-02843 | Cheesy tomato pasta stars | Heinz Mum's Own | 11/2016 | 5143 0428 C | None declared | Cambridge | 10 | 34 | - |
| 15C-02844 | Organic carrots, apples & parsnips | Ella's Kitchen | JUN16 | composite of: 814523481 ES-ECO-19-CT, 814504032 ES-ECO-19-CT & 720701551 ES-ECO-19-CT | EU | Newmarket | 3 | 3 | - |
| 15C-02845 | Organic pasta with cheesy vegetables | Boots Baby Organic | 31.10.2015 | L161880 DE, Nr.021725, Nr.021736, Nr.021766, Nr.021783 | Germany | Newmarket | 4 | 18 | - |
| 15C-02846 | Vegetable and chicken casserole | Heinz | 07/04/16 | J-5098 V | EU | London | 12 | 81 | - |
| 15C-02847 | Organic mixed vegetable medley | Hipp Organic | 08/16 | L175971 DE P02/15, 040385, 040410, 040412, 040415, 040420 | Germany | Harlow | 10 | 34 | - |
| 15C-02848 | Spaghetti bolognese | Heinz Little Kidz | 31/03/2016 | 5091 | EU | Cambridge | 5 | 7 | - |
| 15C-02849 | Spaghetti bolognese | Cow & Gate Little Steamed Meals | 19/07/2016 | AT | EU | Harlow | 60 | 24 | - |
| 15C-02850 | Organic lasagne | Hipp Organic | 15.01.16 | L179361 | Austria | Harlow | 7 | 10 | - |

Category 8 - 2015 samples, continued...

| | | | Best before | | Declared | UK town where | Acrylamide | Furan (| (μg/kg) |
|-------------|--|-----------------------|-------------|---|-------------------|---------------|------------|--------------|-------------|
| Sample code | Product description | Brand | date | Batch code | country of origin | purchased | (μg/kg) | As purchased | As consumed |
| 15C-02851 | Organic tomato & leek pasta | Hipp Organic | 05/05/2016 | V J- | France | Newmarket | 7 | 8 | - |
| 15C-02852 | Organic vegetable + lentil bake | Ella's Kitchen | 05/2016 | 03 G-5112 | EU | Harlow | 9 | 21 | - |
| 15C-02853 | Creamed carrot & potato | Cow & Gate | 13.10.2016 | 120298 A/08989.02/ | EU | Cambridge | 27 | 40 | - |
| 15C-02854 | Carrot, tomato, beef and pasta | Cow & Gate | 28/01/2016 | G- | EU | Cambridge | 8 | 16 | - |
| 15C-02855 | Organic beef stew with spuds | Ella's Kitchen | DEC 2015 | L5085 B8 LA | EU | Cambridge | 11 | 7 | - |
| 15C-02856 | Organic carrot & potato | Boots Baby Organic | 30.09.2016 | L172776 DE Nr.000441 Nr.000489 Nr.000517 Nr.000605 Nr.000612 | Germany | Newmarket | 19 | 17 | - |
| 15C-02857 | Succulent pork casserole | Cow & Gate | 17.04.2017 | 122241 A/08990.03 | EU | Harlow | 23 | 35 | - |
| 15C-02858 | Organic swede, parsnip, carrot & quinoa | Quinoa Mothergrain | 15 05 2016 | -1 | UK | London | 6 | 13 | - |
| 15C-02859 | Organic butternut squash, carrots, apples & prunes | Ella's Kitchen | JUL 16 | composite of of: 615623355 ES-ECO-019-CT & 615623525 ES-ECO-019-CT | EU | Newmarket | 9 | 6 | - |
| 15C-02860 | Organic prunes | Ella's Kitchen | JUN16 | Composite of: 812702435 ES-ECO-019-CT & 414501101 ES-ECO-019-CT | EU | Newmarket | 5 | 3 | - |

Category 9 Processed cereal-based foods for infants and young children - 2014 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (μg/kg) |
|-------------|---|---------------------------|------------------|--|----------------------------|-------------------------|--------------------|
| 14C-02240 | Baby rice | Heinz First Food | 1ST OCT 2015 | L14092KR001 | England | Cambridge | 9 |
| 14C-02241 | Creamy oat porridge breakfast | Heinz Breakfast | 1ST OCT 2015 | L14114KROX1 | England | Cambridge | 4 |
| 14C-02242 | Pure baby rice | Cow & Gate | 31/05/2016 | 000014172 000014823 000015217 000015224 000015265 000015272 | EU | London | 6 |
| 14C-02243 | Multigrain banana porridge | Cow & Gate Sunny Start | 08/06/2016 | 00017463 00017470 00017477 | EU | Cambridge | 13 |
| 14C-02244 | Farley's rusks original | Heinz | 01 01 2016 | 4188 | England | London | 26 |
| 14C-02245 | Organic fruit & porridge | Boots Baby Organic | 23.06.15 | L264 | Switzerland | Cambridge | 9 |
| 14C-02246 | Organic creamy porridge | Hipp Organic | 30.06.2015 | 157188 134 A | Croatia | London | 6 |
| 14C-02247 | Organic baby rice | Hipp Organic | 30.11.2015 | 161143 191 B | Croatia | Cambridge | 4 |
| 14C-02248 | Organic banana & plum porridge | Organix | 07.06.2015 | HD | Austria | Cambridge | 14 |
| 14C-02249 | Organic strawberries & apples nibbly fingers | Ella's Kitchen | 10/03/15 | 4161B | EU | Cambridge | 6 |
| 14C-02250 | Chocolate biscotti | Heinz Snack | 31/05/15 | 4032 1C | Italy | Cambridge | 44 |
| 14C-02251 | Organic apple rice cakes | Organix Finger Foods | 27/06/15 | Н 14177 В | Belgium | London | 165 |
| 14C-02252 | Organic animal biscuits | Organix Goodies | 13.03.2015 | L164 B | Germany | Cambridge | 103 |
| 14C-02253 | Organic baby biscuits | Organix Finger Foods | 23.04.2015 | F14203C | Germany | London | 58 |

Category 9 - 2014 samples, continued...

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (μg/kg) |
|-------------|---|---------------------------|------------------|-------------------------------------|----------------------------|-------------------------|-----------------------|
| 14C-02254 | Organic gingerbread men | Organix Goodies | 07.07.2015 | L188C | Germany | Cambridge | 115 |
| 14C-02255 | Multigrain fruit muesli | Aptamil | 06.07.15 | CE | EU | Cambridge | 11 |
| 14C-02256 | Baby wheat flakes | Cow & Gate Sunny Start | 03/05/2015 | 000005747 000005754 000005761 | EU | Cambridge | 577 |
| 14C-02257 | Apple flavour fruity bakes | Annabel Karmel | 01-04-15 | HQ DI | Netherlands | Cambridge | 14 |
| 14C-02258 | Sunrise banana cereal | Heinz Breakfast | 1ST JUN 2015 | L14065KR001 | England | Cambridge | 6 |
| 14C-02259 | Organic apple and orange soft oaty bars | Organix Goodies | APR 15 | 4/175 | UK | London | 4 |

Category 9 Processed cereal-based foods for infants and young children - 2015 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|--|---------------------------|------------------|--|----------------------------|-------------------------|--------------------|
| 15C-02861 | My first muesli - fruit & nut mix with oats & cereal | Cow & Gate | 13 09 16 | KG | KG EU C | | 6 |
| 15C-02862 | Organic baby rice | Aptamil | 30/10/2016 | 00015528, 00015535, 00015542 00015549, 00015563 | EU | Cambridge | 5 |
| 15C-02863 | Creamy oat porridge | Heinz | 1ST SEP 2016 | L15160KR001 | England | Cambridge | 6 |
| 15C-02864 | Pure baby rice | Cow & Gate | 23/01/2017 | 00004583, 00004591, 00004599 00004607, 00004615, 00004623 | EU | Newmarket | 5 |
| 15C-02865 | Multigrain banana porridge | Cow & Gate Sunny Start | 17.05.17 | 20:28 | EU | Cambridge | 15 |
| 15C-02866 | Rusks - original | Farley's | 01 01 2017 | 5191 | England | Cambridge | 35 |
| 15C-02867 | Organic fruit & porridge | Boots Baby Organic | 31.05.16 | L235 | Switzerland | Newmarket | 10 |
| 15C-02868 | Organic creamy porridge | Hipp Organic | 31.08.2016 | 181283 222 B | Croatia | Cambridge | 6 |
| 15C-02869 | Organic baby rice | Hipp Organic | 30.09.2016 | 178817 141 B | Croatia | Cambridge | 6 |
| 15C-02870 | Organic banana & plum porridge | Organix | 04.07.2016 | СЕ | Austria | Newmarket | 16 |
| 15C-02871 | Organic strawberries & apples oaty nibbly fingers | Ella's Kitchen | 19/02/2016 | 5139A | EU | Newmarket | 7 |
| 15C-02872 | Chocolate biscotti | Heinz Snack | 29/02/16 | 4319 1A | Italy | Newmarket | 41 |
| 15C-02873 | Organic apple rice cakes | Organix Finger Foods | 08/07/2016 | Н 15189 В | | | 138 |
| 15C-02874 | Organic farm animal biscuits | Organix Goodies | 03.07.2016 | L184 B | Germany Cambridge | | 38 |
| 15C-02875 | Organic vanilla baby biscuits | Organix Finger Foods | 28.02.2016 | L148 C | Germany | Cambridge | 12 |

Category 9 - 2015 samples, continued

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) |
|-------------|---|---------------------------|------------------|------------------------------|----------------------------|-------------------------|-----------------------|
| 15C-02876 | Organic gingerbread men | Organix Goodies | 23.06.2016 | .06.2016 L174 A | | Cambridge | 62 |
| 15C-02877 | Multigrain fruit muesli | Aptamil | 16.08.16 | KF | EU | Newmarket | 7 |
| 15C-02878 | Baby wheat flakes | Cow & Gate Sunny Start | 05/03/2016 | 00030348, 00030355, 00030362 | EU | Cambridge | 218 |
| 15C-02879 | Apple flavour fruity bakes | Annabel Karmel | 01-05-16 | DK DI | Netherlands | Cambridge | 10 |
| 15C-02880 | Sunrise banana porridge | Heinz | 1ST SEP 2016 | L15162KR001 | England | Cambridge | 9 |
| 15C-02881 | Organic apple and orange soft oaty bars | Organix Goodies | 04/03/2016 | 1/189 | Switzerland | Cambridge | 4 |

Category 10 Other products, based on cereals, potatoes, cocoa and coffee - 2014 samples

| Sample code | | | Best before | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) | Furan (μg/kg) | |
|-------------|---|----------------------------------|---------------|-------------------|--------------------------------|-------------------------|--------------------|---------------|-------------|
| | Product description | Brand | date | | | | | As purchased | As consumed |
| 14C-02309 | Sweet microwave popcorn | Butterkist | 09.2015 | LW4245 | None declared | Cambridge | 155 | 1 | 77 |
| 14C-02310 | Sweet & salty microwave popcorn | Popz | 05.2016 | L139 | EU | Newmarket | 138 | - | 34 |
| 14C-02311 | Cool original flavour corn chips | Doritos | 13 12 14 | GBC 202 229B 6984 | None declared | Newmarket | 18 | 32 | - |
| 14C-02312 | Lightly salted tortilla chips | Tesco Everyday Value | 02/03/2015 | 34245 0211 | Belgium | Newmarket | 126 | 18 | - |
| 14C-02313 | Jamaica ginger cake | McVitie's | 21 NOV 14 | F3 | UK | Cambridge | 75 | - | - |
| 14C-02314 | Ginger loaf cake | Sainsbury's | 25 OCT 2014 | None declared | UK | Cambridge | 98 | - | - |
| 14C-02315 | Stem ginger loaf cake | Waitrose | 22 SEP | D14250 | UK | Newmarket | 332 | - | - |
| 14C-02316 | Ginger loaf cake | Marks & Spencer | 18/10/2014 | KGF1 | UK | Newmarket | 146 | - | - |
| 14C-02317 | Large all-butter pastry case | Asda Extra Special | 08/JULY/2015 | ALT190 | UK | Cambridge | 6 | - | - |
| 14C-02318 | All butter mini tartlets | Marks & Spencer | 18/03/15 | LOT: 2014282389 | France | Cambridge | 26 | - | - |
| 14C-02319 | Crunchy granola bars - oats & honey | Nature Valley | 07/07/2015 | LB 2502633026 | Spain | Cambridge | 233 | <10 | - |
| 14C-02320 | Wholegrain oat cereal bar - raisin and hazelnut | Jordans Frusli | 21 03 15 | 4205/1 | UK | Cambridge | 7 | <10 | - |
| 14C-02329 | Organic cocoa | Green & Black's Organic | AUG 2016 | L4241 | None declared | Cambridge | 87 | <10 | - |
| 14C-02330 | Bournville cocoa | Cadbury | 01 09 2016 | OCIO243621 | None declared | Cambridge | 425 | 26 | - |
| 14C-02331 | Pure dark chocolate powder | Mortimer Chocolate Company | APRIL 2015 | 4120 | West Africa, made in the UK | Mortimer Common | 22 | <10 | - |
| 14C-02344 | 70% dark chocolate | Divine | 08.2015 | L314071 | Germany using Ghanaian cocoa | Cambridge | 166 | - | - |
| 14C-02347 | Baked potato | Tesco Café | None declared | None declared | None declared | Cambridge | 233 | - | - |

Category 10 Other products, based on cereals, potatoes, cocoa and coffee - 2015 samples

| | | | Best before | | Declared country of | UK town where | Acrylamide | Furan (μg/kg) | |
|-------------|---|----------------------------------|---------------|----------------------|--|--------------------|------------|---------------|----------|
| Sample code | Product description | Brand | date | Batch code | Declared country of origin | purchased | (µg/kg) | As | As |
| | | | | | Origin | | (µg/kg) | purchased | consumed |
| 15C-02882 | Jamaica ginger cake | McVitie's | 07 DEC 15 | F2 | UK | Cambridge | 103 | - | - |
| 15C-02883 | Ginger loaf cake | Sainsbury's | 29 SEP 2015 | None declared | UK | Cambridge | 73 | - | - |
| 15C-02884 | Stem ginger loaf cake | Waitrose | 10 SEP | G15238 | None declared | London | 227 | - | - |
| 15C-02885 | Parkin loaf | Marks & Spencer | 19/09/2015 | JEF 1 | UK | Cambridge | 67 | - | - |
| 15C-02886 | All-butter pastry case | Asda Extra Special | 05/MAY/2016 | ALT126 | UK | Cambridge | 4 | - | - |
| 15C-02887 | All butter mini tartlets | Marks & Spencer | 16/03/16 | 2015289601 | France | Cambridge | 16 | - | - |
| 15C-02888 | Cool original flavour corn chips | Doritos | 05 12 15 | GBC 112 225C 5155 | None declared | Borehamwood | 80 | ı | ı |
| 15C-02889 | Lightly salted tortilla chips | Tesco Everyday Value | 12/02/2016 | 35224 0431 | Belgium | Newmarket | 77 | 1 | 1 |
| 15C-02890 | Sweet microwave popcorn | Butterkist | 07.2016 | LW5190 | None declared | Borehamwood | 628 | - | 205 |
| 15C-02891 | Sweet & salty microwave popcorn | Popz | 05.2017 | L147 | None declared | Shrewsbury | 217 | - | 82 |
| 15C-02892 | Crunchy granola bars - oats & honey | Nature Valley | 29/06/2016 | LA 2502975265 | Spain | Borehamwood | 297 | - | - |
| 15C-02903 | Wholegrain oat cereal bar - raisin and hazelnut | Jordans Frusli | 09 05 16 | 5252/1 | UK | Cambridge | 5 | - | - |
| 15C-02904 | Organic cocoa | Green & Black's Organic | AUG 2017 | L5215 | None declared | Cambridge | 122 | - | - |
| 15C-02905 | Bournville cocoa | Cadbury | 02 08 2017 | OCI 025321 1 | None declared | Cambridge | 464 | - | - |
| 15C-02906 | Pure dark chocolate powder | Mortimer Chocolate Company | AUG 2016 | 5223 | West Africa, made in the UK | Mortimer Common | 21 | - | - |
| 15C-02907 | 70% dark chocolate | Divine | 06.2017 | L125261 | Made in Germany using Ghanaian cocoa | Newmarket | 74 | - | - |
| 15C-02962 | Baked potato | Tesco Café | None declared | None declared | None declared | Cambridge | 735 | 1 | |

Category 11 Other products, not based on cereals, potatoes, cocoa and coffee - 2014 samples

| Sample code | Product description | Brand | Best before date | Batch code | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) | Furan (µg/kg) As As | |
|-------------|---|------------------------------|------------------|---|---|-------------------------|--------------------|---------------------|----------|
| Sample code | 1 roduct description | Diana | | | | | | As purchased | consumed |
| 14C-02305 | Veg crisps | Tyrrell's | 07 12 14 | 3 14215 | England | Newmarket | 1324 | 19 | - |
| 14C-02306 | Vegetable crisps | Marks & Spencer | 09/12/14 | 14 237 2 | UK | Newmarket | 360 | 13 | - |
| 14C-02307 | Vegetable crisps | Waitrose | 14 NOV 14 | 4 220 2 | UK | Newmarket | 716 | 16 | - |
| 14C-02308 | Golden parsnip, sweet potato & beetroot chips | Kettle Vegetable Chips | 28 DEC 14 | Y2 4246 | Netherlands | Cambridge | 812 | 12 | - |
| 14C-02332 | Prunes in syrup | Tesco | AUG 2016 | 4238 12.8 PRY V10 L | UK | Cambridge | 295 | 32ª | - |
| 14C-02333 | Californian pitted prunes in fruit juice | Sainsbury's | SEP 2016 | DAS V6 4267 04 L | UK | Cambridge | 82 | 11ª | - |
| 14C-02334 | Pitted black olives in brine | Tesco | JUL 2016 | 4198 | Spain | Cambridge | 1031 | 11 | - |
| 14C-02335 | Pitted black olives in brine | Crespo | 13.06.2017 | L40601 II 009555 009557 009562 | Spain | Cambridge | 269 | 11 | - |
| 14C-02336 | Organic soft dried prunes | Waitrose Organic | OCT 2015 | L4283H070 | Produce in France Produced in the UK | Newmarket | 16 | - | - |
| 14C-02337 | Stoned dates | Whitworths | DEC 2015 | L4 218B | Produce of more than one country Packed in the UK | Cambridge | 12 | - | - |
| 14C-02338 | Scottish raspberry preserve | Mackays | SEP 2018 | 4245 RY L1 | Scotland | Cambridge | - | <2 | - |
| 14C-02339 | Strawberry jam | Hartley's | AUG 2016 | 4234 | None declared | Cambridge | - | 2 | - |
| 14C-02340 | Blackcurrant conserve | Marks & Spencer | 08/2015 | H4224 | UK | Newmarket | - | <2 | - |
| 14C-02341 | Apricot jam | Duerr's | JUN 2016 | L4142 | None declared | Newmarket | - | 3 | - |
| 14C-02342 | Original liquorice | Panda | 14.07.15 | None declared | None declared | Newmarket | 175 | - | - |
| 14C-02343 | Pontefract cakes soft liquorice | Haribo | 12/2015 | L441-24414 - 0101101 1320 | None declared | Cambridge | 139 | - | - |

^a drained weight basis

Category 11 Other products, not based on cereals, potatoes, cocoa and coffee - 2015 samples

| | | | Best before | | Declared country of origin | UK town where purchased | Acrylamide (µg/kg) | Furan (µg/kg) | |
|-------------|---|------------------------------|-------------|---|---|-------------------------|--------------------|-----------------|----------|
| Sample code | Product description | Brand | date | Batch code | | | | As | As |
| | | | | | 2 | * | | purchased | consumed |
| 15C-02893 | Veg crisps | Tyrrell's | 17 12 15 | 15 225 2 | England | Borehamwood | 514 | - | - |
| 15C-02894 | Sweet potato, parsnip and | Marks & | 08/12/15 | 15 236 2 | UK | Newmarket | 884 | - | _ |
| | beetroot vegetable crisps | Spencer | | | | | | | |
| 15C-02895 | Vegetable crisps | Waitrose | 29 OCT 15 | 5 204 2 | None declared | London | 736 | = | = |
| 15C-02896 | Golden parsnip, sweet potato & beetroot chips | Kettle Vegetable Chips | 15-11-2015 | Y 3 5180 | Netherlands | Cambridge | 774 | - | - |
| 15C-02908 | Prunes in syrup | Tesco | AUG 2017 | 5222 12.7 L - PRY V10 | UK | Cambridge | 424 | 60 ^a | - |
| 15C-02909 | Californian pitted prunes in fruit juice | Sainsbury's | MAY 2017 | 5149 04 L - DAS V6 | UK | Cambridge | 72 | 19ª | - |
| 15C-02910 | Pitted black olives in brine | Tesco | JUL 2017 | 5187 | Spain | Cambridge | 720 | - | - |
| 15C-02911 | Pitted black olives in brine | Crespo | 19.06.2018 | L50522 13.20 11 072841 072848 072957 | Spain | Cambridge | 331 | - | - |
| 15C-02912 | Organic soft dried prunes | Waitrose Organic | SEP 2016 | L5253H170 | None declared | Newmarket | 9 | - | - |
| 15C-02913 | Block dates | Whitworths | DEC 2016 | L5 224B | Produce of more than one country Packed in the UK | Newmarket | 134 | - | - |
| 15C-02914 | Natural original liquorice | Panda | 250816 | 270515 | Finland | Cambridge | 68 | - | - |
| 15C-02915 | Pontefract cakes soft liquorice | Haribo | 12/2016 | L441-24815 -01 017 01 0804 | None declared | Cambridge | 35 | - | - |

^a drained weight basis