

PRESS RELEASE - London, 4 April 2017

High levels of carcinogenic chemical, acrylamide, found in potato crisps from major UK brands and retailers

Nearly one in five [17 per cent] potato crisp varieties sampled from major retail food outlets in the UK have high levels of acrylamide, a known carcinogen, reveals independent testing.

The study, conducted by the Changing Markets Foundation, reviewed 92 potato snacks from major UK snack brands and own-brand super market crisps.

A sample of sweet potato crisps from Tyrrells had the highest level of acrylamide at 2483.6 µg/kg; these levels are 2.5-times above the European benchmark and over 83-times higher than products with the lowest concentration.

The presence of acrylamide in food is considered a public health concern by the European Food Safety Authority (EFSA) as it increases the risk of developing cancer, and young children are the most vulnerable [1]. Moreover, a recent study from the UK Food Standards Agency (FSA) concluded that people in the UK currently consume higher levels of the chemical, acrylamide, than is desirable and identified fried potatoes as a major contributor to acrylamide exposure [2].

In total, sixteen samples exceeded the recommended EU benchmark (1000 µg/kg), with supermarket own brand products (12 samples) performing significantly worse than major snack brands (4 samples). The worst performing supermarket brands were Morrisons and ALDI, with three products above the benchmark each.

Brand	Product	Acrylamide (µg/kg)
Tyrrells	Sweet potato lightly sea salted crisps	2483.6
Morrisons	Cheese & onion flavoured popped potato snacks	2067.5
Morrisons	Sea salted crinkle cut potato crisps	1825.8
Aldi (Passions)	Barbeque flavour popped potato chips	1778
Seabrook	Natural sea salt lattice crisps	1708
Co-Operative (Truly Irresistible)	Smoked paprika sweet potato hand cooked crisps	1680.7
Co-Operative (Christmas)	Crunchy potato 3D Christmas Tree with sour cream and chives	1541.6
Seabrook	Sea salt and red wine vinegar lattice crisps	1525.9
Aldi (Snackrite)	Belight reduced fat assorted potato crisps	1440.2
Tesco	Variety flavour thick crinkle cut potato	1400.2
Seabrook	Sea salted crisps	1326.5
Waitrose (Essentials)	Salt your own crisps	1252.1
Aldi (Snackrite)	Ready salted potato crisps	1229.2
Morrisons	Ready salted potato sticks	1198.5
Sainsbury's	Ready salted potato sticks	1076
ASDA	Salt your own potato crisps (plain potato crisps with sachet of salt)	1021.2

Thirty-one samples were above the lower EU benchmark (750 µg/kg) that will likely become part of new regulation.

Today's findings come just a few months after the FSA published the results from its own monitoring showing 13 products exceeding the recommended acrylamide benchmarks. Products sampled from Seabrook, ALDI and ASDA brands have been found to exceed such benchmarks in both studies [3].

Nusa Urbancic from Changing Markets, said *"The results published today reveal that several companies found to exceed dangerous acrylamide levels by the FSA haven't done anything to address this problem. Seabrook, ALDI and ASDA continue to place on the market crisps with high levels of this carcinogen. This clearly points to the failure of self-regulation by industry and weak enforcement by the FSA."*

The presence of acrylamide, which is formed when starchy foods are heated up, can be significantly minimised by food business operators through a variety of measures [4], as seen with samples with low levels of acrylamide.

Nevertheless, many food operators are still unaware of acrylamide or unwilling to take measures to reduce the levels due to a lack of mandatory legal limits [5].

In response to this, a legislative proposal on acrylamide in food [6] is currently being discussed by the European Commission and Member States and a vote is expected in June. This proposal has been heavily criticised by food safety and consumer protection groups because it fails to introduce legally binding maximum limits for acrylamide, which is the approach taken on other contaminants in EU law.

The weak legislative proposal will prolong the *status quo*, where companies can continue to sell their products even when these are found to have high levels of acrylamide. However, the European Commission has recently announced that it intends to introduce tougher measures on certain products in the future [7].

"European legislators cannot continue to turn a blind eye to the wealth of data showing that high levels of acrylamide in every day products like crisps and baby foods continue to put consumers' health at risk" concluded Urbancic. "Industrially prepared food is the biggest source of consumer exposure to this carcinogen and only immediate introduction of legally binding limits will guarantee that industry does its job and that consumers don't have to worry about acrylamide in their food."

About the Analysis

The samples were prepared and analysed for acrylamide by Fera Science Ltd in York (UKAS ISO17025 accredited laboratory). The analytical method was gas chromatography–mass Spectrometry (GC-MS), which has a reporting limit of 30 µg/kg. The samples were taken in different retailers across London in January 2017.

About Changing Markets:

The Changing Markets Foundation partners with NGOs on market focused campaigns. Our mission is to expose irresponsible corporate practices and drive change towards a more sustainable economy.

www.changingmarkets.org / [@ChangingMarkets](https://twitter.com/ChangingMarkets)

For media inquiries:

Bethan Halls – Bethan.halls@greenhousepr.co.uk

Notes to editors:

- [1] EFSA's scientific opinion on acrylamide in food
<https://www.efsa.europa.eu/en/efsajournal/pub/4104>
- [2] FSA's Total Diet Study
<https://www.food.gov.uk/sites/default/files/fsis-2014-tds-acrylamide.pdf>
- [3] <https://www.food.gov.uk/sites/default/files/acrylamide-furan-report.pdf>
- [4] Food and Drink Europe's Acrylamide's Toolbox
http://www.fooddrinkeurope.eu/uploads/publications_documents/AcrylamideToolbox_2013.pdf
- [5] <https://www.efsa.europa.eu/sites/default/files/event/documentset/141210-p13.pdf>
- [6] European Commission's draft legislative proposal
<http://www.foodnavigator.com/Policy/Acrylamide-proposals-strengthened-in-new-draft>
- [7] <http://www.foodnavigator.com/Policy/Commission-to-set-maximum-acrylamide-levels-in-ready-to-eat-foods>

ANNEX – ANALYTICAL RESULTS

Note to editor: EU benchmark for potato snacks is set at 1000 µg/kg (products above in red) 2013/647/EU. A lower benchmark of 750 µg/kg (products above in orange) is currently under consideration by Member States. There are no safe levels for acrylamide in food and health authorities agree that the industry should make efforts for the levels to be as low as reasonably achievable. This table shows that the levels of acrylamide can be significantly reduced.

No.	Brand	Product	Acrylamide (µg/kg)
1	Tyrrells	Sweet potato lightly sea salted crisps	2483.6
2	Morrisons	Cheese & onion flavoured popped potato snacks	2067.5
3	Morrisons	Sea salted crinkle cut potato crisps	1825.8
4	Aldi (Passions)	Barbeque flavour popped potato chips	1778
5	Seabrook	Natural sea salt lattice crisps	1708
6	Co-Operative (Truly Irresistible)	Smoked paprika sweet potato hand cooked crisps	1680.7
7	Co-Operative (Christmas)	Crunchy potato 3D Christmas Tree with sour cream and chives	1541.6
8	Seabrook	Sea salt and red wine vinegar lattice crisps	1525.9
9	Aldi (Snackrite)	Belight reduced fat assorted potato crisps	1440.2
10	Tesco	Variety flavour thick crinkle cut potato	1400.2
11	Seabrook	Sea salted crisps	1326.5
12	Waitrose (Essentials)	Salt your own crisps	1252.1
13	Aldi (Snackrite)	Ready salted potato crisps	1229.2
14	Morrisons	Ready salted potato sticks	1198.5
15	Sainsbury's	Ready salted potato sticks	1076
16	ASDA	Salt your own potato crisps (plain potato crisps with sachet of salt)	1021.2
17	Hula Hoops (KP)	Golden Baked Hoops salt & vinegar flavour	987.6
18	Walkers (french fries)	Ready salted potato sticks	983.5
19	Walkers	Air popped potato crisps	966
20	ASDA	Variety flavour ridge cut potato crisps	965.2
21	Walkers (Salt shake)	Salt shake potato crisps	935.8
22	Waitrose (Lovellife)	Crinkle Cut Crisps	924
23	TESCO	Shake to salt crisps	892.8
24	Walkers (Squares)	Variety flavour squared potato snacks	843.8
25	Burts	Guinness Rich Chilli thick cut hand cooked chips	838
26	M&S	Reduced fat lightly salted crinkle potato crisps	825.2
27	Walkers	Variety ready salted potato crisps	819.5
28	Waitrose (Essentials)	Ready salted crisps	814.7
29	Walkers (Market Deli)	Anglesey sea salt chips	770.7
30	Deluxe (Lidl UK & Ireland)	Sea salt & balsamic vinegar flavoured hand cooked potato chips	765.6
31	M&S	Ready salted potato sticks	765.2

No.	Brand	Product	Acrylamide (µg/kg)
32	Deluxe (Lidl UK & Ireland)	Lightly salted hand cooked potato chips	729.9
33	Mc Coy's (KP)	Thick Cut flat crisps assorted flavours	688
34	ASDA	Ready salted potato loops	683.5
35	TESCO (finest)	Sea salt and cider vinegar hand cooked potato chips	660.1
36	Mc Coy's (KP)	Thick Cut cheddar & red onion flavour crisps	648.9
37	Sainsbury's	Assorted potato crisps	611
3	Walkers (Tear 'n' share)	Thicker cut crisps lightly salted	609.1
39	SNAKTASTIC (Lidl UK)	Variety flavour potato crisps	603.5
40	ASDA	Ready salted potato crisps	602.3
41	Deluxe (Lidl UK & Ireland)	Sea salt & crushed black peppercorn hand cooked potato chips	591.6
42	Specially selected (Aldi)	Cheddar & ale hand cooked crisps	586.4
43	M&S	Assorted crisps	583.2
44	Sainsbury's (Taste the Difference)	Sea salted & Suffolk cider vinegar hand cooked	543.7
45	Waitrose	Crisp & Crunch Sea salt hand cooked crisps	540
46	Popchips	Pop chips sea salt	519.7
47	Kettle Chips	Hand cooked chips lightly salted	519.5
48	Lay's	Paprika flavour potato crisps	498.9
49	Co-operative (Irresistible)	Hand cooked Christmas dinner crisps	497
50	M&S	Lightly salted sea salted hand cooked crisps	491.9
51	Walkers (Crinkles)	Salt & malt vinegar flavour crinkle-cut crisps	480.1
52	Kettle Chips	Sea Salt & Balsamic Vinegar chips	475
53	Tyrrells	Sea salted furrows	468.3
54	Smiths	Maize and potato chipsticks salt and vinegar flavour	408.1
55	Tyrrells	Hand-cooked sweet chilli & red pepper crisps	406
56	Sainsbury's (Taste the Difference)	Sea salted hand cooked	387.2
57	Walkers (lights)	Simply salted reduced fat crisps	384.7
58	Co-operative (Irresistible)	Hand cooked lightly sea salted crisps	372.8
59	TESCO (everyday value)	Assorted flavours crisps	365.7
60	Walkers (Sensations)	Thai Sweet Chilli flavour crisps	362.4
61	Tyrrells	Naked no salt crisps	344.3
62	Walkers (crinkles)	Crinkled simply salted crisps	344
63	Sainsbury's	Sea salt popped potato chips	328.4
64	Walkers (Max)	Ridged Cheese and Onion Flavour Potato Crisps	327.2
65	Walkers (baked)	Cheese & onion flavour baked potato snacks	315.6
66	SNACKRITE (Aldi)	Ready salted potato Stackers (flat crisps)	311.8
67	ASDA (crispy fries)	Ready salted variety	304.9
68	Kettle Chips	Ridge cut chips sea salted	304
69	Co-operative (Irresistible)	Hand cooked sea salt & chardonnay wine vinegar crisps	302.4
70	Mc Coy's (KP)	Ridge cut salted crisps	299

No.	Brand	Product	Acrylamide (µg/kg)
71	ASDA (potato discs)	Ready salted variety potato discs	287.8
72	Morrisons	Salt or not salt crisps	285
73	Passions (Aldi)	Lightly salted hand cooked potato crisps	278.5
74	Co-operative (Irresistible)	Hand cooked west country cheddar & red onion chutney crisps	246.6
75	CRUSTI CROC (Lidl France)	Ready salted potato crisps	204.9
76	Hula Hoops (KP)	Puffed hoops salted (pufts)	167.5
77	Walkers (baked)	Ready salted baked potato snack	129.6
78	Hula Hoops (KP)	Puffed hoops salt & vinegar (pufts)	128.9
79	Walkers (Pops)	Air popped potato crisps flavour sour cream and onion	109.7
80	Pringles	Original salted crisps	88.2
81	TESCO	Chipz Lightly salted potato snack	87.4
82	Morrisons (The Best)	Hand cooked sea salt crisps	61.56
83	TESCO	Ready salted potato rings	44.5
84	M&S	Lightly ted popped potato snacks	38.9
85	SNAKTASTIC (Lidl UK & Ireland)	Cheese flavoured potato snacks	32.5
86	Sainsbury's	Ready salted potato rings	<30
87	Pringles	Salt & vinegar crisps	<30
88	Hula Hoops (KP)	Salted potato rings assorted flavours	<30
9	Tyrrells	Lightly sea-salted crisps	<30
90	Pom-Bear	Pom-Bear Potato Snacks	<30
91	Walkers (Wavers)	Light curly potato snacks cheese flavour	<30
92	M&S	Ready salted potato rings	<30