



BURNING ISSUE: is scorched food toast?

Reduction of the potential carcinogen acrylamide will shortly become a legal obligation for food businesses. Here is what lies behind the headlines and how the pub trade will be affected

ANDREW DON REPORTS

The Food Standards Agency (FSA) launched its consumer campaign Go for Gold on 23 January to help people understand how to minimise exposure to what it describes as “a possible carcinogen” called acrylamide.

The launch attracted media attention on a massive scale, with headlines such as ‘How burnt toast and roast potatoes became linked to cancer’ (*The Guardian*, 27 January), creating a level of awareness among the general population that previously did not exist.

Was it scaremongering though, and are food police resources better spent elsewhere? The European Food Safety Authority (EFSA) and the FSA say not.

A naturally forming chemical

EFSA describes acrylamide as a chemical that naturally forms in starchy food products, during everyday high-temperature cooking.

The chemical process that causes this is known as the Maillard reaction and it browns food and affects its taste – in short, burnt potato products, such as chips, croquettes, roast potatoes and toast are deemed a risk. Potato crisps and coffee substitutes contain relatively high levels says EFSA, but their overall contribution to dietary exposure is limited based on a normal, varied diet.

However, not everyone agrees. David Spiegelhalter, professor of the public understanding of risk at the Winton Centre for risk and evidence communication at Cambridge University says that while acrylamide can be, in large doses, “a very nasty substance... there is no good evidence of harm from humans consuming acrylamide in their diet”.

He adds: “Reactions to the FSA’s Go for Gold campaign may range from extremes of encouraging obsessive concern in the ‘worried well’, to irate editorials on yet another intrusion from the ‘nanny state’. More worryingly, people might just consider this yet another scare story from scientists and lead them to dismiss truly important warnings about, say, the harms from obesity,” he claims.

The chip manufacturers disagree. Nic Townsend, marketing manager UK & Ireland at Farm Frites, says: “As food operators, we’re lucky that the FSA is there to temper these issues [in the media] and identify any future activity that is needed to make food safer for those within the trade and the public we cater for.”



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Townsend adds pub operators should work with reputable suppliers, communicate regularly with them and use products that are supplied with clear and thorough cooking instructions.

“Part of our relationship with operators, when we launch new products, is to go in and show them how to cook our products for the best results.

“Going down the route of a convenience product that is pre-prepared and supplied frozen can reduce concern as long as the packaging is clear and instructions are followed,” explains Townsend.

Pubs have more control over potential issues with prepared products compared with handmade because fewer people are required in the cooking and handling process, he says.

“If you are buying prepared products you have a simpler task of training staff in how to consistently prep the frozen product and ensuring that front-of-house staff give a good service and can answer to the public.”

Mohammed Essa, commercial director at Aviko UK & Ireland, says his company rejects potatoes when the sugar content is too high because acrylamide is formed when foods containing amino acid asparagine and sugars are heated too high.

Mark Willis, head of chemical contaminants at the FSA, says: “The scientific consensus is that acrylamide is a cancer risk and we know that it forms on some foods during cooking. The more you cook them, the more acrylamide forms and, therefore, the risk increases.”

Cook food to a lighter colour

The FSA has advised people to cook food such as potatoes and toast to a lighter colour so less acrylamide forms.

Willis says this does not mean that people should avoid cooking such foods completely, but they can take simple steps to lower the risk.

“This advice complements the work the food industry is doing to reduce the level of acrylamide across the food chain,” he says.

The FSA has ‘updated’ its consumer advice following findings from its Total Diet Study, which confirmed EFSA’s assessment that people in the UK currently consume higher levels of acrylamide than they should.

Food Drink Europe (FDE) has produced sector-specific codes of practice on acrylamide to embed throughout the food chain to build on the existing



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FDE 'toolbox' and pamphlets.

The British Hospitality Association (BHA) is leading the production of 'simple' supporting guidance for the UK foodservice and hospitality sector, which the FSA is supporting.

An approach is currently under consideration that will require food businesses to ensure that industry codes of practice on acrylamide management are embedded in their food safety systems, which will be a legal requirement and enforced in the same way as any other food safety risk.

Should the approach be agreed, food-service businesses, such as pubs, will be expected to include acrylamide management as part of their normal Hazard Analysis and Critical Control Points (HACCP) systems.

Finalised regulation

This will be enshrined under European Parliament and Council Regulation 852/2004 on the hygiene of foodstuffs.

Willis says the proposal is still the subject of discussion between the European Commission and member states but it is expected to be finalised in "the coming months".

McCain did not comment directly, describing it as "a broader food industry matter relating to a wide number of enquiries" and referred *The Morning Advertiser (MA)* to the Food and Drink Federation and Potato Processors' Association (PPA). Fellow potato manufacturer Lamb Weston also referred *MA* to the PPA.

Once the industry guide is published, pubs can follow simple steps to ensure compliance

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PPA director-general Sharon Hall says: "As a sector, we continue to invest resources to reduce acrylamide. As well as applying best practices in the acrylamide toolbox, manufacturers also voluntarily review cooking instructions on all packaging to guide end-users to bake or fry at optimal times and temperatures."

She pointed to the www.goodfries.eu website, which provides information on how to prepare chips in a healthy way and includes a training video and printable instructions that can be placed in a professional kitchen.

Jay Williams, head chef at the Duke of Cambridge, Tilford, Surrey, one of Red Mist Leisure's seven houses, says he never burns chips although he has had customers who have asked him to.

He says the latest warnings might mean he adjusts how far he makes chips go crispy but he would take his lead from the company's food safety experts.

"There's a level of scaremongering but, at the same time, there's probably some truth in certain aspects of it," he says.

JD Wetherspoon says it has not had any questions about acrylamide from customers but if it does, staff should refer these questions to head office.

The pubco says it has set standards for storing frozen chips and cooking from frozen in a fryer for three minutes and 15 seconds, which ensures "a consistent, high-quality product that is not overcooked".

A Punch spokeswoman says: "We take food safety extremely seriously and once

FASCINATING FACT

"Triple-cooked chips may actually not be so bad, because they are made by washing cut potatoes to remove starch and then blanched, which will remove even more starch. If the frying keeps to recommended temperatures and times, and the end product is golden, then there is no problem"

Dr Lisa Ackerley, food safety adviser, British Hospitality Association



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we have finalised guidelines, we will continue to work with the relevant bodies to ensure we are compliant."

British Hospitality Association food safety adviser Dr Lisa Ackerley claims the FSA would have been criticised if it had not made people aware of "the facts" about acrylamide.

But she adds there are plenty of other important issues in food safety.

She doubts the acrylamide issues will be damaging to pubs. "All pubs need to do is to follow the Go for Gold rules for now. Once the industry guide is published, they can follow simple, practical steps in order to ensure they are compliant without it being too burdensome."

It's about consumers

Ackerley urges pub chefs to ask their suppliers for details on what they have done to ensure cooking instructions for their products will lead to a reduced risk of acrylamide.

British Beer & Pub Association policy manager for product assurance and supply chains Steve Livens says it is always wise to be aware when there is a food safety concern and to keep it back of mind. "I'm not sure the way it's been handled is perhaps the best way things could have been done, but the thing to bear in mind is that this is about consumers and helping people understand cooking practices in their own homes," he says.

"There's a broad principle of good practice in food preparation, handling and cooking, that resonates within all of this... it's not just the cooking process itself but also links back to agriculture and farming."

TOP TIPS



- Cook or toast foods to light rather than dark colours
- Always follow manufacturers' cooking instructions
- Fry foods at lower temperatures
- Decrease the cooking time when possible
- Blanch potatoes before frying them
- Avoid overheating oils and fats
- Frequently change oils and fats
- Don't store potatoes in the fridge
- Avoid bruised potatoes