

SAFE Food Advocacy Europe – Position paper

To protect consumers' health, we need legally binding limits for acrylamide in food

SAFE – Safe Food Advocacy Europe has provided feedback numerous times over the years to European policymakers regarding the regulation of acrylamide levels in food.¹ According to the European Food Safety Authority (EFSA), the main toxicity risks of acrylamide are "Neurotoxicity, adverse effects on male reproduction, developmental toxicity and carcinogenicity"². The EFSA findings related to the genotoxicity risks of acrylamide have been again confirmed in 2022.³ In recent studies, further positive associations between dietary acrylamide and certain cancers have also been suggested, notably breast cancer.⁴

We acknowledge the European Commission's efforts in addressing this critical issue and commend the initiative to establish maximum legally binding levels for acrylamide in certain food products, as outlined in Regulation 2017/2158.⁵ **SAFE is very disappointed by the lack of action by the European Commission since 2017 on this issue, as legally binding maximum levels of acrylamide have not yet been established, as was foreseen in Recital 15 of the abovementioned regulation.**

To make matters worse, there is a significant lack of consumer awareness regarding acrylamide. This deficiency prevents consumers from making informed choices when purchasing food and when preparing and cooking meals in ways that minimise acrylamide formation. As a result, many remain exposed to the harmful effects of this substance. Daily intake of dietary acrylamide can be particularly high for those who frequently consume starchy foods like cookies, crackers, potato crisps, and cereals that are cooked at high temperatures.

SAFE continues to be deeply concerned about several aspects of existing regulations relative to acrylamide and the danger they represent to consumers at large, and particularly in relation to the safety of infants and young children, who are among the most vulnerable consumers.

¹ <https://www.safefoodadvocacy.eu/wp-content/uploads/2020/06/Acrylamide-Position-paper-2020.pdf>

² "Scientific Opinion on acrylamide in food". *EFSA Journal*. **13** (6). June 2015.

Retrieved from: <https://efsa.onlinelibrary.wiley.com/doi/abs/10.2903/j.efsa.2015.4104>

³ Benford D, Bignami M, Chipman JK and Ramos Bordajandi L, 2022. Scientific report on the assessment of the genotoxicity of acrylamide. *EFSA Journal* 2022; 20(5):7293, 45 pp.

<https://doi.org/10.2903/j.efsa.2022.7293>

⁴ Bellicha, A., Wendeu-Foyet, G., Coumoul, X., Koual, M., Pierre, F., Guéraud, F., Zelek, L., Debras, C., Srouf, B., Sellem, L., Kesse-Guyot, E., Julia, C., Galan, P., Hercberg, S., Deschasaux-Tanguy, M., & Touvier, M. (2022). Dietary exposure to acrylamide and breast cancer risk: results from the NutriNet-Santé cohort. *The American journal of clinical nutrition*, 116(4), 911–919. <https://doi.org/10.1093/ajcn/nqac167>

⁵ <https://www.safefoodadvocacy.eu/wp-content/uploads/2022/03/SAFEs-Letter-to-DG-Sante-on-acrylamide.pdf>

As a result, Safe Food Advocacy Europe is launching a broad awareness campaign to put the issue of acrylamide back on the political agenda.

The campaign features targeted communication activities designed to raise consumer awareness about acrylamide and offer tips on how to reduce its presence in daily diets. SAFE aims to implement a dual strategy: empowering consumers to make informed choices and urging European policymakers to take decisive action to protect the health of European citizens, particularly the youngest, from the risks of dietary acrylamide.

Tests conducted by SAFE and its member consumer organisations across Europe highlighted the urgent need for new measures to limit the presence of acrylamide in food products for consumers, and those intended for infants and young children in particular, as early as 2017.⁶

In 2019, ten other European consumer groups sampled over 500 food products known to contain acrylamide,⁷ such as crisps, biscuits, coffee or breakfast cereals, and largely confirmed the earlier findings presented by SAFE. Regular biscuits and wafers were found to be especially problematic, with a third of samples at or above the acrylamide benchmarks. Tests also showed that on average crisps made of carrots, beetroots or parsnips contained almost twice as much acrylamide as the potato versions, although they were often perceived as healthier options.

The 2023 CVUA Stuttgart study also demonstrated that although for many food products acrylamide benchmarks are not exceeded, there is still a significant number of food products in each major category for which acrylamide benchmarks are exceeded. These categories are extensive and include French fries, potato chips, wheat-based bread, crispbread, instant coffee, gingerbread, crackers, cornflakes and exhausted breakfast cereals.⁸ For these food product categories, between 5% and 15% of all products tested were above the benchmarks set out by the European Commission.

Other recent scientific reviews which have looked at specific food categories such as bakery products have also concluded that there is a strong need for reducing acrylamide concentrations by making the industry change some of its methods, such as baking at lower temperatures, or using alternative baking techniques. However, due to the fact acrylamide is potentially carcinogenic, SAFE considers that more action must be taken by public authorities to make food producers take additional steps to reduce the levels of acrylamide in foodstuffs, as it is unlikely that industry as a whole will voluntarily take those measures unless they are obligated to.⁹

In summary, SAFE's main observations and asks include:

⁶ <https://www.safefoodadvocacy.eu/wp-content/uploads/2020/04/SAFE-Position-on-Maximum-Levels-for-Acrylamide.pdf>

⁷ <https://www.test-achats.be/sante/alimentation-et-nutrition/securite-alimentaire-et-additifs/news/acrylamide-test>

⁸ [CVUA Stuttgart | 5 Years EU Acrylamide Release... \(ua-bw.de\)](#)

⁹ Sarion, C., Codină, G. G., & Dabija, A. (2021). Acrylamide in Bakery Products: A Review on Health Risks, Legal Regulations and Strategies to Reduce Its Formation. *International journal of environmental research and public health*, 18(8), 4332. <https://doi.org/10.3390/ijerph18084332>

1. **Lack of defined maximum levels of acrylamide in food:** The current benchmark levels set by the Commission have proven ineffective in adequately protecting consumers' health, particularly in the case of products consumed by infants and young children. With EFSA and other bodies such as the U.S. Environmental Protection Agency (EPA) having named acrylamide as a probable carcinogenic substance, SAFE urges the establishment of legally binding maximum levels for all food categories where acrylamide poses a risk, including potato crisps, breakfast products, and French fries, which would ensure that dangerous food products do not remain on the EU market.
2. **Baby foods:** SAFE strongly advocates for the establishment of maximum binding levels well below the value of 50 µg/kg. We believe that setting a higher maximum level than the current benchmark of 40 µg/kg could hinder efforts to reduce acrylamide content in these products. Moreover, in line with the precautionary principle, SAFE recommends setting maximum levels below the current benchmark value, as studies suggest that achievable lower acrylamide levels in baby foods could be as low as 1 µg/kg.
3. **Biscuits and risks for infants and young children:** While there is no proposed increase in maximum levels for these products, SAFE emphasizes the importance of adopting levels significantly below the value of 150 µg/kg. It is imperative to constantly strive for the reduction of acrylamide levels in foods consumed by infants and young children. Additionally, we propose that all standard biscuits marketed to children, falling under the category of "biscuits and wafers," should adhere to the same maximum level as biscuits and risks specifically intended for infants and young children.¹⁰
4. **Breakfast cereals:** SAFE recommends lowering the benchmark level for breakfast cereal products consumed by children below 3 years of age. These products, commonly consumed by young children, should be subject to stricter regulations to ensure the health and safety of vulnerable consumers.
5. **New potential categories to be regulated:** SAFE supports the inclusion of additional food categories in the regulation of acrylamide levels, such as roasted nuts,¹¹ and vegetable chips. These products have in some studies shown high acrylamide levels and should be subject to regulatory scrutiny to safeguard consumer health. Vegetable chips for instance were found to contain very high levels of acrylamide (as high as 3500 µg/kg) in various samples analysed by CVUA Stuttgart in 2023.¹² Additionally, vegetable chips samples tested over time between 2018 and 2023 have shown that there has been a

¹⁰ Esposito, F.; Nolasco, A.; Caracciolo, F.; Velotto, S.; Montuori, P.; Romano, R.; Stasi, T.; Cirillo, T. Acrylamide in Baby Foods: A Probabilistic Exposure Assessment. *Foods* **2021**, *10*, 2900. <https://doi.org/10.3390/foods10122900>

¹¹ Asadi, S., Aalami, M., Shoeibi, S., Kashaninejad, M., Ghorbani, M., & Delavar, M. (2020). Effects of different roasting methods on formation of acrylamide in pistachio. *Food science & nutrition*, *8*(6), 2875–2881. <https://doi.org/10.1002/fsn3.1588>

¹² [CVUA Stuttgart | 5 Years EU Acrylamide Release... \(ua-bw.de\)](#)

clear trend of continuously increasing levels of acrylamide in those foods. Another 2024 study on acrylamide in foods in Germany¹³ also showed that the measured acrylamide levels in vegetable crisps were twice as high as the benchmark level set by the European Commission for potato crisps (750 µg/kg).

In conclusion, SAFE calls upon the European Commission and the European Parliament to prioritize the safety of consumers, particularly infants and young children, as both institutions begin a new mandate. Achieving this can be done in multiple ways, as outlined by SAFE in its European elections manifesto,¹⁴ **but one urgent priority relates to the establishment of stricter and lower maximum values regarding acrylamide in food.**

We urge European policymakers to consider our recommendations and to take decisive action to mitigate the health risks associated with acrylamide exposure in food products. SAFE will continue to campaign for future EU legislation on acrylamide that seriously protects European consumers.

¹³ Perestrelo, S., Schwerbel, K., Hessel-Pras, S., Schäfer, B., Kaminski, M., Lindtner, O., & Sarvan, I. (2024). Results of the BfR MEAL Study: Acrylamide in foods from the German market with highest levels in vegetable crisps. *Food chemistry: X*, 22, 101403. <https://doi.org/10.1016/j.fochx.2024.101403>

¹⁴ <https://www.safefoodadvocacy.eu/wp-content/uploads/2023/07/SAFE-MANIFESTO.pdf>