

Acrylamide levels in food

Feedback to the European Commission

Document addressed to the European Commission by SAFE – Safe Food Advocacy Europe ASBL

SAFE would like to thank the Commission for giving the opportunity to provide feedback regarding the application of the Commission Regulation 2017/2158.

However, SAFE is disappointed to observe that after three years from the application of the Regulation legally binding maximum level for certain food has not been established yet, as provided in Recital 15.

In addition, SAFE notices that in the Recommendation 2019/1888, the Commission mentioned additional food categories not yet covered by Annex IV of the Regulation 2017/2158, whose acrylamide content could be monitored in the future.

We would like to point out the following elements that are worthy of concern:

1. BACKGROUND

As stated in the [previous position paper](#) written in 2019, SAFE strongly believes that the Commission should change the current Regulation 2017/2158 on acrylamide, which provides a benchmark level of 40 µg/kg for the category of baby food. SAFE is still strongly concerned about the impact this value could have on the health of the youngest consumers and encourages the Commission to reconsider the setting of a lower acrylamide maximum level.

Concerning biscuits and rusks for infants and young children, SAFE fosters the adoption of a benchmark level well below the suggested value of 150 µg/kg. The guiding principle must be a constant reduction of the levels of acrylamide for those foods largely consumed by infants and young

children. Moreover, categories of food such as “*biscuits and wafers*”, whose benchmark level is 350 µg/kg and are largely consumed by infants and children, should have the same maximum level than “*biscuits and rusks for infants and young children*”.

2. BREAKFAST CEREALS

As well as for the “Biscuits and wafers” category, breakfast cereal products are commonly eaten by children and babies below 3 years old age. For this reason, the acrylamide benchmark level should be lowered down. Currently, the Commission Regulation 2017/2158 states that *bran products, whole grain cereals, gun puffed grain, and wheat and rye based products*, which are contained in the “breakfast cereals” category, has a benchmark level of 300 µg/kg.

SAFE suggests decreasing the 300 µg/kg benchmark level of these products as for *maize, oat, spelt, barley, and rice breakfast products*, and treat them as products potentially consumed by children, in order to protect the health of younger and more vulnerable people.

3. LACK OF ACRYLAMIDE MAXIMUM LEVEL IN FOOD

The [latest studies](#) on acrylamide in food have shown that benchmark levels, set by the Commission, are not effective enough to correctly protect European citizens’ health. Tests on 532 samples in a 2019 study show worrying results. Some of the categories that have been included in the study were below regulation benchmarks, but categories such as *baby food, coffee, bread, chicory, breakfast products, crackers, potatoes products, and French fries* resulted above benchmarks established by the European Commission. In particular, 13% of baby food, 7.7% potato crisps, and 6.3% biscuits samples have been found not in compliance with European benchmarks. The tests result is even more disappointing when we notice that the majority of these products are related to infants and children.

Furthermore, [a study](#) led by SAFE’s member il Salvagente on French fries, another category extremely sensitive to children at their young age, discovered that seven out of eighteen samples (almost the 30%) had an acrylamide level above 800 µg/kg, exceeding the benchmark value set out by the European Union of 750 µg/kg. The highest concentration of acrylamide found in a sample was 1600 µg/kg, a value that is more than double the benchmark level.

Since the European Food Safety Authority (EFSA) and many extra-European bodies such as the U.S. Environmental Protection Agency (EPA) - which classified acrylamide as a Group B2, namely probable human carcinogenic substance - claimed the dangerousness of acrylamide, SAFE strongly believes that Recital 15 of the Commission Regulation 2017/215, which considers establishing maximum binding levels of acrylamide in food, should be taken into account.

4. NEW POTENTIAL CATEGORIES TO BE REGULATED

SAFE is pleased to see that additional food categories have been added in the Commission Recommendation 2019/1088, with the aim of better monitoring their content in acrylamide. Many of these products show a high acrylamide level. A [study](#) revealed that Spanish *churros* tend to develop high levels of acrylamide when fried at temperatures of 180-190-200°, while [another study](#) stated that *roasted cocoa beans* reach harmfully acrylamide levels even at lower temperatures. [Other studies](#) point out the potential dangerousness of *dried fruits* and *roasted nuts*. Some samples of roasted nuts highlighted the acrylamide level above 1000 µg/kg, which is higher than any benchmark level set in the Commission Regulation 2017/2158. On the other hand, even though they are not subject to high temperatures, dried fruits present a surprising amount of acrylamide due to their exsiccation over a long time. Lastly, relatively high acrylamide levels in *vegetable crisps* have been noted. On [27 samples studied](#) an average acrylamide content of 1121 µg/kg was detected, with a median value of 830 µg/kg. This is almost double the median value for acrylamide levels in tested potato crisps. Thus, SAFE proposes acrylamide maximum levels also for categories included in the Commission Recommendation and not yet present in the Commission Regulation 2017/2158.

Moreover, SAFE encourages the inclusion of acrylamide maximum levels for new categories that could be monitored in the near future. For instance, a [Canadian study](#) detected a high level of acrylamide in prune juice, probably due to the prolonged boiling and/or pasteurisation of prunes.

5. CONCLUSIONS

SAFE notes the Commission's step in order to limit the exposure of acrylamide and define acrylamide levels for those foods.

We recommend the Commission to establish safer binding levels for acrylamide in types of food largely consumed by young children, with particular reference to those biscuits, wafers, and breakfast cereal products that are directly marketed to children. Besides, we would like to highlight that benchmark levels for acrylamide in food are not strong enough and there is a need for regulated maximum levels, as suggested in Recital 15 of Commission Regulation 2017/2158, which better protect European consumers' health.

Finally, SAFE advocates for the inclusion of Commission Recommendation categories in the acrylamide regulation 2017/2158 and hopes that the monitoring of new categories will be taken into account by the European Commission.