

## **SAFE response to Public Consultation on Food safety – plastic food contact materials (FCMs) (update to quality control rules)**

SAFE – Safe Food Advocacy Europe welcomes the proposed revision of quality control rules for plastic food contact materials (FCMs). SAFE welcomes the introduction of purity requirements for substances obtained from waste and natural materials, the adaptation of migration testing of multi-layer materials as well as repeat testing. SAFE notes that the proposed changes positively contribute to the principal stated objectives of the broader revision of EU rules on FCMs, namely ensuring a high level of public health protection, reducing the presence and use of hazardous chemicals, taking account of the latest advances in science and technology as well as supporting innovation and sustainability by promoting safe reusable and recyclable solutions.

Nevertheless, we consider that this revision does not go far enough to be able to ensure food safety for all European citizens. SAFE published a policy report in 2020<sup>1</sup> which underscored the main limits of EU regulation in this area and would like to further highlight relevant remaining concerns when it comes to these rules, which pertain notably to:

- the lack of attention on final articles,
- the lack of scientific and political scrutiny in the risk assessment procedure, and
- the lack of mechanisms to control Endocrine Disruptors in FCMs.

Statistics show that there are over 12,000 distinct chemical substances intentionally used in FCMs<sup>2</sup>, not to mention unknown and non-intentionally added ones. These chemicals, including hazardous ones classified as carcinogenic substances and/or Endocrine Disruptors, can transfer from FCMs into food, representing an important health issue that cannot be ignored. Endocrine Disruptors such as phthalates, adipates, styrene or bisphenol A, to name only a few, are often present in plastic containers and can migrate into food. According to experts, these substances are increasingly believed to be key factors contributing to the ever-growing number of citizens suffering from type 2 diabetes, obesity, reproductive issues, and some types of cancer.

Equally important, several studies indicate that the migration level of those substances into food is even higher with recycled plastic. For instance, a comparative study on recycled and virgin polystyrene used in FCMs manufacturing shows a higher volume of chemical leakage into the vegetable oil that is in contact with recycled polystyrene compared to the virgin FCM<sup>3</sup>. Another study assessing the safety of (multiple-)recycled high-density polyethylene (HDPE)

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<sup>1</sup> <https://www.safefoodadvocacy.eu/wp-content/uploads/2021/03/SAFE-Report-on-Recycled-plastic-in-FCMs-2020.pdf>

<sup>2</sup> Groh K, Geueke B, Muncke J. FCCdb: Food Contact Chemicals database. <https://doi.org/10.5281/zenodo.3240108>. Zenodo; 2020.

<sup>3</sup> Kanwal et al. (2007). FT-IR analysis of recycled polystyrene for food packaging. Journal – Chemical Society of Pakistan, 29(3): 239–242.

and polypropylene (PP) FCMs finds increasing migration rates of some additives during repeated recycling<sup>4</sup>.

On final articles, the current regulations on FCMs continue to primarily focus on starting substances and recycling processes, neglecting the complexity of non-intentionally added substances (NIAS) present in final articles. These NIAS, including external contaminants and by-products from various manufacturing and recycling stages, pose challenges to safety assessments due to their uncharacterized nature and unpredictability<sup>5</sup>. Recycled plastics, in particular, harbor higher levels of NIAS complexity, compounded by intrinsic contaminants from intended materials and previous use. Monitoring NIAS systematically in recycled FCMs is essential, as these materials may accumulate a greater number of chemicals through multiple recycling cycles, and contaminants from non-food grade plastics and waste management processes are challenging to remove. Introducing sorting systems to distinguish FCMs from non-food grade plastics presents a significant challenge, highlighting the inadequacy of current risk assessments in ensuring the safety of final FCMs.

On the general lack of scrutiny over the risk assessment procedure, SAFE points out that the current legislation continues to lack provisions for independent scientific review, hindering transparency and objectivity. To address this, we advocate for collaboration with independent research centres and data collection by non-industry entities to ensure unbiased assessment.

Lastly, despite being acknowledged as potential health hazards, the assessment of endocrine disruptor (ED) effects from chemicals migrating into food is not conducted under current regulations. Furthermore, low-level exposures to potential EDs often go untested due to thresholds below toxicologically established levels. Addressing these gaps in regulation is crucial to establish a new assessment process ensuring FCMs are free from endocrine disruptors<sup>6</sup>.

In conclusion, while the proposed revisions represent progress and a step in the right direction when it comes to enhancing food safety and protecting European citizens, there remain pertinent concerns, most notably regarding the three issues outlined above. Addressing these is imperative for ensuring comprehensive food safety regulation across Europe.



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<sup>4</sup> Coulier et al. (2007). Analytical protocol to study the food safety of (multiple-)recycled high-density polyethylene (HDPE) and polypropylene (PP) crates: influence of recycling on the migration and formation of degradation products. *Polymer Degradation and Stability*, 92(11): 2016–2025.

<sup>5</sup> Muncke et. al. (2017). Scientific challenges in the risk assessment of food contact materials. *Environmental Health Perspectives*, 125(9)

<sup>6</sup> Muncke, J., Andersson, AM., Backhaus, T. et al. (2020). Impacts of food contact chemicals on human health: a consensus statement. *Environmental Health Perspectives* 19(25)