



FACTSHEET Food contact materials

What are food contact materials?

Food contact materials (FCMs) are **all types of packaging materials and products our food is in contact with**. This includes paper wraps, plastic packaging, glass and metal containers, ceramic plates, kitchen utensils, bamboo kitchenware, as well as all items used in professional food manufacturing, storage, and distribution.

Is food packaging safe?

Chemicals present in packaging can leach into our food, thereby putting consumers' health at risk. In the EU, over 8,000 chemicals are estimated to be used to produce FCMs.¹

Food packaging also contains and releases chemicals that the manufacturer did not use intentionally. These are counted in the tens of thousands, only a fraction of which are known or studied.

Chemicals leaching from FCMs may thus be the largest and least controlled source of food contamination, exceeding other sources such as pesticide residues by a factor 100.²

What do EU laws do about such materials?

According to EU legislation, all FCMs must be safe and not impair food quality. But this legal requirement does not match reality, **as specific EU rules exist mainly for plastic materials**. Consequently, it is often impossible to ensure that non-plastic materials – such as paper – are safe, as the European Parliament highlighted in 2016.⁴

The EU plastic rules are meanwhile insufficiently protective and partly outdated. The rules for example do not cover the safety of some categories of chemicals, such as colourants.

Many approved chemicals are not re-checked when new evidence on their possible health effects comes to light. For example, a 2014 review showed that 21 chemicals approved under the plastic rules had been identified as Substances of Very High Concern under the EU's main chemicals law, REACH.⁵



SOME TEST RESULTS BY CONSUMER ORGANISATIONS IN EUROPE:

- In 2019, four BEUC members found that **food packaging made of coloured paper and cardboard – such as coffee cups and straws – released chemicals of concern**. The safety of most of these chemicals has not been assessed.
- In 2019, Stiftung Warentest found that **bamboo-based plastic cups released high amounts of melamine and formaldehyde**, two substances suspected to cause cancer.
- In 2017, UFC-Que Choisir found **high levels of fluorinated compounds in 4 out of 14 fast food packaging samples**. These compounds, known as PFAS, are suspected to impair human health, such as causing cancer, infertility, and obesity.

¹ J. Muncke et al. [Impacts of food contact chemicals on human health: a consensus statement](#). *Environmental Health* 19. March 2020.

² K. Grob et al. 2006. Food Contamination with Organic Materials in Perspective: Packaging Materials as the Largest and Least Controlled Source? *Critical Reviews in Food Science and Nutrition* 46.

³ Food Contact Materials - Regulation (EC) 1935/2004.

⁴ EU Parliament's [Report on the implementation of the Food Contact Materials Regulation \(\(EC\) No 935/2004\) \(2015/2259\(INI\)\)](#), 2017.

⁵ B. Geuke et al. [Food contact substances and chemicals of concern: a comparison of inventories](#). *Food Additives & Contaminants: Part A* 31, 2014.



Finally, the **EU mostly turns a blind eye to the thousands of unintentional contaminants leaching from FCMs**. FCM producers are not required to assess – let alone minimise – potential food contaminants released from their packaging materials or products.

Overall, this **situation is unacceptable**, and calls for a rethink of the EU's FCM legislation to better protect European consumers.

What does BEUC recommend?

The EU's [Farm to Fork strategy](#) adopted in 2020 rightly commits the Commission to revise the FCM legislation to improve food safety and public health. To achieve this, BEUC recommends the EU to urgently:

- **REGULATE ALL FCMs:** including those made from recycled or novel materials, such as bamboo or palm leaves. New rules to control and minimise food contamination from FCMs are required. In addition, existing legal limits should be revisited to better protect consumers.
- **ESTABLISH A PRECAUTIONARY APPROACH** to protect consumers against chemicals of concern in the face of scientific uncertainty. Substances of high concern – such as endocrine disruptors or chemicals that may cause cancer – should be automatically prohibited in FCMs.
- **APPLY THE 'NO DATA, NO MARKET' PRINCIPLE.** Business operators should be required to document the safety of their FCMs, including of the chemical mixtures migrating from finished products. Regulators must rigorously police the accuracy and reliability of this information.
- **ENSURE THAT MANUFACTURERS STICK TO THE RULES.** Member States must allocate enough resources to enforce the rules governing FCMs. The European Commission should ensure that official controls are shared, coordinated, and streamlined throughout Europe. This could help avoid that the same product is controlled repeatedly, whereas others are not controlled at all.

More details in our position paper [Time is ripe to repackage food safely, 2019](#)



WHAT ABOUT THE 'GLASS AND FORK' SYMBOL? It indicates that materials or products are intended for food contact. For consumers, it is however often unclear from the packaging how to use it. This can lead to risky practices, such as re-using single-use ice-cream containers to store hot or fatty foods.

A survey⁶ found that only 48% of German consumers correctly identified the meaning of the Glass and Fork symbol. As a result, the EU FCM rules may underestimate health risks considering actual consumer behaviour.

⁶ Verbraucherzentrale. [Bevölkerungsbefragung zu Lebensmittelkontaktmaterialien](#). September 2020.