

What are Food Contact Materials?

Food contact materials (FCMs) are any materials or articles made from plastics, paper and cardboard or any other material that come into contact with food, hot or cold, including liquids. This includes food packaging as well as kitchenware and tableware such as plates, cups, cutlery and saucepans, and everyday articles used to prepare and serve your food.

How is the safety of food contact materials ensured?

[EU law](#) requires that all FCMs need to be safe and should not affect the safety of the food nor alters its taste or smell. **For plastics**, all substances used to make the final plastic article must be first assessed for their safety and authorised to be used in the plastic FCM that is placed on the market in the EU.

What is the Bamboozling enforcement action all about?

The action aims at stopping the illegal import, trade and advertising of **plastic articles** sold as food contact materials, e.g. tableware, containing bamboo and other unauthorised plant-based additives. The EU-coordinated action ended in April 2022 and although official reporting is no longer taking place, Competent Authorities in the Member States are maintaining their vigilance and controls. 21 countries participated in the coordinated action¹, which led to a significant increase in the identification of illegal and fraudulent products. Producers, importers, and distributors were required by Member States to immediately withdraw items from the market.



What is the problem with Plastic Food Contact Materials containing bamboo and other plant-based additives?

Most plant-based additives including bamboo – usually added as ground bamboo fibres – have not been assessed for their safety by the European Food Safety Authority (EFSA) and thus may present a health risk. Many plastic FCM articles containing bamboo have suffered from accelerated degradation, which has caused leaching of formaldehyde and melamine, substances used in the manufacture of the plastic, into the food, sometimes above safe levels. In addition, these plastics are often advertised and sold as eco-friendly and made entirely of natural plant material. This is false advertisement and misleading consumers purchasing decisions.

¹ Austria, Belgium, Czechia, Germany, Denmark, Estonia, Spain, Finland, France, Greece, Hungary, Ireland, Italy, Lithuania, Luxembourg, The Netherlands, Norway, Malta, Poland, Portugal and Slovenia.



Is my health at risk if I use tableware, cups or other products “made of” bamboo?

There is no acute health risk from food contact articles but continual exposure to the elevated levels of **formaldehyde** and **melamine** has the potential to cause a health concern. Recommendations on the maximum amounts of melamine and formaldehyde that can be ingested have been set that ensure the safety of consumers. Those limits have been set taking into account also other sources of exposure, such as from the foods themselves. Ingestion of high amounts of those substances, above the health based maximum limits, may have some health effects. For example, melamine may affect the urinary tract or the kidneys. However, the amount (several 100x) melamine and formaldehyde originating from those plastic kitchenware and tableware articles is a fraction of the total to which consumers are exposed.

Was there a case where such dangerous products were identified?

Plastic food contact materials containing bamboo filler may pose a risk to human health. The laboratory analysis of a sample of coffee cups with bamboo fibres manufactured in China detected the migration of melamine at 3,5 times and of formaldehyde at 25 times above their maximum permitted level. The items were destroyed.

Who worked on the Bamboozling enforcement action?

Member States' authorities (food safety authorities and customs) cooperated at national and at EU level. Information was exchanged between Member States' authorities, food safety authorities, members of the EU Food Fraud Network and the customs authorities.

What was the outcome?

During the one-year lasting action, **748 cases of plastic food contact materials containing unauthorised bamboo powder** were notified by the action participants. Of these 748 cases, 644 were products found on the EU market, while 104 were goods rejected at the EU border. 580 of the 644 products were sold (sometimes exclusively) online.

The action allowed also to detect food contact materials made of other plant-based additives, which are not authorised either in the EU. The most used was wheat, including wheat straw. Other identified additives were rice husks, maize, vegetable fibres and plant parts.

Was the information only exchanged between the authorities or also with consumers?

Retailers, importers and manufacturers were reminded of the law.

Through the European Consumer Organisation and other information channels, European consumers were informed about the illegality of these tableware and kitchenware articles. While such communication efforts were made during the action, it is still important to continue sensitising stakeholders and raising awareness among consumers!

False and misleading advertisement

When sold, these products are often advertised as ‘natural’, ‘eco-friendly’, ‘compostable’ or ‘recyclable’. These claims are false as the articles are made of plastics and mislead the consumers into buying something they believe to be natural or sustainable. Often those plastic products are not sustainable or recyclable.

How do I recognise legal or illegal food contact materials?

Those illegal plastic products are made of a mixture of plant-based fibres/material and plastic polymers. Their feel is that of plastic (smooth, plastic surface) as indeed they are plastics. They are easy to distinguish compared to articles made entirely of plant material, such as bamboo, as the article retains the natural structure and look of the plant-material.

Illegal - Plastic FCM containing “bamboo” additive



Legal - Cutlery made of 100% bamboo



Sometimes, these plastic products are also labelled as “organic”. Even if the plant-based additive used is organic, the organic label can only be used for food under the Regulation (EC) No 834/2000.

National authorities are responsible for the evaluation and control of these misleading aspects on a case-by-case basis.

What do I do with a recently bought item?

It is advised to return it to the retailer or contact the platform, if bought online. If the retailer or the platform continues selling these items, consumers might consider informing their national food safety authority.²

What do I do with items already bought some time ago?

Since the product cannot be considered safe for the use for food, it is advised to not use it for food and safely dispose of it in the waste bin (as it is not compostable). Heating the article, using it for hot foods or washing it in the dishwasher may increase the amounts of melamine and formaldehyde which migrate to the foods. Likewise, use for infants and children who are more sensitive should be avoided.



Further information

2022

- https://food.ec.europa.eu/system/files/2022-07/food-fraud-reports_20220615_minutes.pdf [link to FFN meeting June 2021]

2021

- 6 May: [Minutes](#)

Useful links:

- [Legislation on food contact materials](#)

²https://food.ec.europa.eu/system/files/2022-09/food-fraud_contact-points.pdf;
https://ec.europa.eu/info/live-work-travel-eu/consumer-rights-and-complaints/enforcement-consumer-protection/consumer-protection-cooperation-network_en#cpc-actors

- [Note on the use of bamboo \(see table 23 June\)](#)
- [List of competent national food fraud contact points](#)
- [List of competent consumer protection authorities](#)
- [Information on resolving cross-border consumer complaints](#)
- [Scientific opinion 10.2903/J.efsa.2019.5902 adopted by EFSA on 24 October 2019: “Update of the risk assessment of ‘wood flour and fibres, untreated’ \(FCM No 96\) for use in food contact materials, and criteria for future applications of materials from plants origin as additives for plastic food contact materials”](#)
- National actions against the illegal import and distribution of plastic food contact materials containing bamboo or other illegal vegetal additives [BE](#) / [NL](#) / [LU](#) / [DE](#) / [PL](#)