RECOMMENDATIONS

COMMISSION RECOMMENDATION (EU) 2022/495

of 25 March 2022

on monitoring the presence of furan and alkylfurans in food

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 292 thereof,

Whereas:

(1) Furan and alkylfurans, which include methylfurans such as 2-methylfuran, 3-methylfuran and 2,5-dimethylfuran, are process contaminants that are formed in foods during thermal processing.

(2) The European Food Safety Authority (EFSA) Panel on Contaminants in the Food Chain adopted a scientific opinion in 2017 on the risks that the presence of furan and methylfurans in food poses to public health ([1]). It concluded that the current levels of exposure to furan indicate a health concern. As for methylfurans, the opinion concluded that they may add significantly to the overall exposure to furan and alkylfurans and therefore increase the health concern. However, as data are lacking on the presence of methylfurans in food EFSA recommended producing additional data in this area. In particular, furan and alkylfurans have been reported to occur in coffee, jarred baby food, ready-to-eat soup, potato-based crisps, fruit juices, breakfast cereals, biscuits, crackers and crispbread.

(3) 2-methylfuran and 3-methylfuran can be reliably quantified with the currently available methods of analysis, while further work is needed for the reliable analysis of 2,5-dimethylfuran. However, if the used method of analysis enables it, it would be appropriate to analyse and quantify 2,5-dimethylfuran and to report the data.

(4) Furthermore, the scientific literature has recently pointed to the presence of food contaminants related to alkylfurans other than methylfurans, such as 2-pentylfuran and 2-ethylfuran. It would therefore be appropriate to analyse and quantify such additional (non-methylfurans) alkylfurans, provided that the method of analysis is reliable for this purpose.

(5) The results of the monitoring of furan and alkylfurans must be reliable and comparable. It is therefore appropriate to provide instructions on sampling and analytical performance criteria.

(6) EFSA has a mandate from the European Commission to collect all available data on the occurrence of chemical contaminants in food and feed. These data are used in EFSA's scientific opinions and reports on contaminants in food and feed.

(7) It is therefore appropriate to recommend that furan and alkylfurans in food be monitored and the data reported to EFSA.

HAS ADOPTED THIS RECOMMENDATION:

1. Member States should, with the active involvement of food business operators, monitor furan, 2-methylfuran and 3-methylfuran in food, in particular in coffee, jarred baby food (including baby food in containers, tubes and pouches), ready-to-eat soup, potato-based crisps, fruit juices, breakfast cereals, biscuits, crackers and crispbread.

([1]) EFSA CONTAM Panel (EFSA Panel on Contaminants in the Food Chain), Scientific opinion on the risks for public health related to the presence of furan and methylfurans in food. EFSA Journal 2017;15(10):5005, 142 pp. https://doi.org/10.2903/j.efsa.2017.5005

2. To ensure that the samples are representative, Member States should follow the sampling procedures laid down in part B of the Annex to Commission Regulation (EC) No 333/2007 ([2]). Food business operators should also apply this sampling procedure or an equivalent sampling procedure, ensuring the sample is representative.

3. For the analysis of furan, 2-methylfuran and 3-methylfuran in coffee and jarred baby food, Member States and food business operators should use a method that complies with the following criteria:

Parameter	Criterion
Specificity	Free from matrix or spectral interferences
Field blanks	Less than limit of detection (LOD)
Repeatability (RSDr)	0,66 times RSDR as derived from (modified) Horwitz equation
Reproducibility (RSDR)	As derived from (modified) Horwitz equation
Recovery	80 – 110 %
Limit of detection (LOD)	Three tenths of LOQ
Limit of quantification (LOQ)	For coffee: not higher than 20 µg/kg For jarred baby food: 5 µg/kg

For the analysis of furan in foods other than coffee and jarred baby food, Member States and food business operators should use a method that complies with these criteria and the limit of quantification (LOQ) should not be higher than 5 µg/kg.

For the analysis of 2-methylfuran and 3-methylfuran in foods other than coffee and jarred baby food, laboratories should have quality control procedures in place to ensure the reliability of the obtained analytical results where the LOQ should not be higher than 5 µg/kg.

4. If the used method of analysis enables the determination of alkylfurans other than 2-methylfuran and 3-methylfuran, Member States and food business operators should determine those alkylfurans.

5. Member States and food business operators should provide the monitoring results to EFSA by 30 June of each year, in line with the requirements of EFSA's Guidance on Standard Sample Description (SSD) for Food and Feed and EFSA's additional specific reporting requirements ([3]).

Done at Brussels, 25 March 2022.

For the Commission
Stella KYRIAKIDES
Member of the Commission

([2]) Commission Regulation (EC) No 333/2007 of 28 March 2007 laying down the methods of sampling and analysis for the official control of the levels of lead, cadmium, mercury, inorganic tin, 3-MCPD and benzo(a)pyrene in foodstuffs (OJ L 88, 29.3.2007, p. 29).

([3]) https://www.efsa.europa.eu/en/call/call-continuous-collection-chemical-contaminants-occurrence-data-0