RECOMMENDATIONS

COMMISSION

COMMISSION RECOMMENDATION

of 3 May 2007

on the monitoring of acrylamide levels in food

(notified under document number C(2007) 1873)

(Text with EEA relevance)

(2007/331/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES.

have already been undertaken since 2002 in order to reduce the levels of acrylamide in processed foods.

Having regard to the Treaty establishing the European Community, and in particular the second indent of Article 211 thereof,

Whereas,

- (1) The Scientific Panel on Contaminants in the Food Chain of the European Food Safety Authority (EFSA) adopted on 19 April 2005 a statement on acrylamide in food in which it endorsed the risk assessment on acrylamide in food carried out by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) in February 2005. In that assessment JECFA concluded that the margins of exposure for average and high consumers were low for a compound that is genotoxic and carcinogenic and that this may indicate a human health concern. Therefore, appropriate efforts to reduce acrylamide concentrations in foodstuffs should continue.
- (2) The food industry and the Member States have investigated pathways of formation of acrylamide. The food industry has developed voluntary measures, such as the so-called 'toolbox' (1) approach, which provides guidance to help producers and processors identify ways to lower acrylamide in their respective products. Extensive efforts
- (¹) The 'toolbox' contains 13 different parameters ('tools'), grouped together in four main categories ('toolbox compartments') that can be used selectively by food producers in line with their particular needs in order to lower acrylamide levels in their products. The four compartments refer to agronomical factors, the food recipe, processing and final preparation.

- (3) It is necessary to collect reliable data on acrylamide levels in food over at least a three-year time span across the Community in order to get a clear picture of the levels of acrylamide in those foodstuffs that are known to contain high acrylamide levels and/or contribute significantly to the dietary intake of the whole population and of specific vulnerable groups, such as infants and young children.
- (4) It is important that these data are reported once a year to EFSA who will ensure the compilation of these data into a database.
- (5) The analytical results will be evaluated in order to assess the effectiveness of voluntary measures. The monitoring programme provided for by this Recommendation may be adapted at any time if this is appropriate in view of the experiences gained,

HEREBY RECOMMENDS:

1. That Member States perform annually in 2007, 2008 and 2009, in accordance with Annex 1 the monitoring of acrylamide levels in the foodstuffs referred to in that Annex.

- 2. That Member States provide by 1 June each year the monitoring data of the previous year to EFSA with the information and in the format as set out in Annex II for compilation into one database.
- 3. That Member States, for the purpose of the monitoring programme, follow the sampling procedures as laid down in part B of the Annex to Commission Regulation (EC) No 333/2007 of 28 March 2007 on 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 (¹) in order to ensure that the samples are representative for the sampled lot.
- 4. That Member States carry out the analysis of acrylamide in accordance with the criteria laid down in points 1 and 2 of Annex III to Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls to ensure the verification of compliance with feed and food law, animal health and animal welfare rules (2).

Done at Brussels, 3 May 2007.

For the Commission Markos KYPRIANOU Member of the Commission

ANNEX I

A. Sampling points and procedure:

- 1. The sampling of the products should be carried out at market level (e.g. at supermarkets, smaller shops, bakeries, French fries outlets and restaurants), where there is a good traceability, or at production sites. Products with origin in one of the Member States should be sampled wherever possible (1).
- 2. Sampling and analysis should be carried out before the expiry date of the sample.

B. Products, sample numbers and frequencies, analytical requirements

- 1. Table 1 gives an overview on the recommended minimum number of samples to analyse annually for each product category. Member States are invited to take more samples when possible. The distribution of samples per Member State is based on population figures with a minimum sample number of four per product and Member State.
- 2. The sample numbers refer to the minimum number of samples to be taken annually. Where specific conditions apply (e.g. sampling twice yearly) this is specified in Annex I, point C for each product group.
- 3. Since each product category comprises a wide variety of products with different specifications, additional information should be provided for each of the products sampled (as specified in Annex I, point C). In order to see time trends it is important that products with the same specifications (e.g. same type of bread, same brand, etc.) are sampled every year where possible. For French fries sampled at small shops, the same shops should be chosen every year if possible.
- 4. If in products with the same specification results below the limit of quantification (LOQ) are obtained repeatedly, the product can be exchanged with another product provided that it falls in the same product category and a description of the product is given.
- 5. To ensure comparability of analytical results methods should be chosen that can achieve an LOQ of 30 μ g/kg (most intense ion/ion transition) for bread and baby foods and 50 μ g/kg for potato products, other cereal products, coffee and other products. Results shall be reported corrected for recovery.

⁽¹⁾ In exceptional cases a specific product may only be on the market as imported from a third country. In such cases samples of the imported product can be taken.

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Minimum sample numbers per product category

]]	1	İ	Ī	1	1	İ	1	İ	1	1	1	1			İ		1	İ	1		İ		İ	1	İ	Ī
Total	44	44	40	44	230	44	140	40	44	194	44	44	194	44	40	40	40	40	62	44	140	44	40	44	194	44	80	2 042
Other products (10)	8	8	4	8	14	8	14	4	8	14	8	8	14	8	4	4	4	4	8	8	14	8	4	8	14	8	8	224
Processed cereal- based baby foods (9)	4	4	4	4	24	4	14	4	4	20	4	4	20	4	4	4	4	4	9	4	14	4	4	4	20	4	8	202
Roasted coffee (7) Jarred baby foods (8)	4	4	4	4	24	4	14	4	4	20	4	4	20	4	4	4	4	4	9	4	14	4	4	4	20	4	8	202
	4	4	4	4	24	4	14	4	4	20	4	4	20	4	4	4	4	4	9	4	14	4	4	4	20	4	8	202
Biscuits, including infant biscuits (6)	4	4	4	4	24	4	14	4	4	20	4	4	20	4	4	4	4	4	9	4	14	4	4	4	20	4	8	202
Breakfast cereals (5)	4	4	4	4	24	4	14	4	4	20	4	4	20	4	4	4	4	4	9	4	14	4	4	4	20	4	8	202
Bread (4)	4	4	4	4	24	4	14	4	4	20	4	4	20	4	4	4	4	4	9	4	14	4	4	4	20	4	8	202
Pre-cooked French fries/ potato products for home cooking (3)	4	4	4	4	24	4	14	4	4	20	4	4	20	4	4	4	4	4	9	4	14	4	4	4	20	4	8	202
Potato crisps (2)	4	4	4	4	24	4	14	4	4	20	4	4	20	4	4	4	4	4	9	4	14	4	4	4	20	4	8	202
French fries sold as ready to eat (1)	4	4	4	4	24	4	14	4	4	20	4	4	20	4	4	4	4	4	9	4	14	4	4	4	20	4	8	202
Country of sale	AT	BE	CY	CZ	DE	DK	ES	EE	GR	FR	Ħ	HU	П	IE	ΠΠ	LT	ΓΛ	MT	NL	PT	PL	SE	IS	SK	UK	BG	RO	Total

C. Minimum additional information to be provided for each product

The minimum additional information which should be provided for each product sampled is specified in points 1 to 10. Member States are invited to provide more detailed information.

1. French fries, sold as ready-to-eat: sampling twice a year in March and November (1), resulting in the total number of samples specified in the table. Ready-to-eat products should be sampled at small outlets, fast food chains and restaurants. Each year sampling should take place at the same outlets whenever possible.

Specific information to be provided: starting material fresh potatoes or pre-fabricates, addition of other ingredients.

2. Potato crisps: sampling twice a year in March and November (1), resulting in the total number of samples specified in the table.

Specific information to be provided: starting material fresh potatoes or pre-fabricates, addition of other ingredients, flavours or additives.

3. Pre-cooked French fries/potato products for home cooking: including products sold frozen. Sampling twice a year in March and November (¹), resulting in the total number of samples specified in the table. Analysis of each sample should be carried out on the product after preparation (e.g. frying, baking, etc). The preparation should take place in the laboratory according to the instructions on the label. Specific information to be provided: starting material potatoes or pre-fabricates, addition of other ingredients, product sold fresh or frozen, conditions used for preparation according to the label.

4. Bread:

Specific information to be provided: soft or crisp bread, fibre content, type of grain, fermented/not fermented, type of fermentation (e.g. yeast), other ingredients. The choice of the type of bread to be sampled should reflect the eating habits of each country.

5. Breakfast cereals: excluding muesli and porridge.

Specific information to be provided: type of grain, other ingredients (e.g. sugar, nuts, honey, chocolate).

6. Biscuits (including infant biscuits):

Specific information to be provided: soft or hard, for normal population or for diabetics, full list of ingredients.

7. Roasted coffee:

Specific information to be provided: degree of roasting (e.g. medium, dark), type of beans if available, sold as ground coffee or as beans.

8. Jarred baby foods:

Potato, root vegetable or cereals containing food should be targeted. Specific information to be provided: composition of the jar.

9. Processed cereal-based baby foods: analysed as sold.

Specific information to be provided: type of grain, other ingredients.

⁽¹⁾ In case the foodstuff is produced from potato pre-fabricates sampling twice a year is not necessary.

10. Other products:

This category includes potato products, cereal products, coffee products, cocoa products and infant food other than those products specified in one of the categories above (e.g. potato rösti, gingerbread, coffee substitutes). Samples should be chosen to reflect the national dietary habits of the Member States. They may need to be analysed after cooking according to the label. If so, the conditions used should be specified.

Specific information to be provided: detailed product description (e.g. major ingredients), conditions used for preparation according to the label.

ANNEX II A. Reporting format

		Ī			ı		
		Measure- ment uncer- tainty (%)					
		Limit of quantifi- cation (µg/kg)					
		Limit of detection (µg/kg)					
		Acryl- amide level (µg/kg)					
		Details on pro- ficiency tests					
		Analytical					
		Method ac- An credited m (Y/N)					
		Date of analysis (dd/mm/ yy)					
		Prep- aration con- ditions					
		Sample weight (g)					
		Sampling Pack size point (g)					
		Sampling point					
		Sampling date (dd/mm/yy)					
		Best before Production date date (dd/mm/yy) (dd/mmyy) (
		Best before date (dd/mm/yy)					
		Producer (ISO Codes)					
		Producer					
		Product description					
try:		Product					
Reporting country:		Product class (1 to 10)					
Rep	Year	Sample					

B. Explanatory notes to the reporting format

Reporting country: Member State in which the monitoring has been carried out.

Year: year of sampling.

Sample code: laboratory identification code of the sample.

Product class number: number of product class according to Annex I, Table 1 (insert figures from 1 to 10, e.g. French fries (1), potato crisps (2), etc.

Product name: includes the product name in English and the original language.

Product description: a short product description should be given taking into account at least the information required under Annex I, point C.

Producer: name of producer if available.

Country of production: if available. Use ISO codes for the country of production (for ISO Codes see Annex I, Table 1, first column). According to Annex I, point A the sampled product should originate in one of the Member States where this is possible (see footnote 4).

Best before date: as indicated on the label. Provide the date in the format dd/mm/yy.

Production date: where available as indicated on the label. Provide the date in the format dd/mm/yy.

Sampling date: date the sample was taken. Provide the date in the format dd/mm/yy.

Sampling point: place where the sample was collected, e.g. supermarket, small shop, bakery, fast food chain, etc.

Pack size: pack size (g) of the product of which the incremental samples were taken where applicable.

Sample weight: sample weight (g) of the aggregate sample.

Preparation conditions: preparation conditions should be specified in the case of pre-cooked French fries or other potato products for home cooking (product class 3) which should be sampled and analysed after cooking. The cooking instructions of the label should be followed and specified in this field. The same might apply to some 'other products' (product class 10).

Date of analysis: if the sample was homogenised and stored before analysis the date of the actual start of the analytical procedure should be given. Details should be given about storage conditions in this case.

Method accredited: please indicate with 'Y' (yes) or 'N' (no) if the analytical result has been generated by a method accredited according to EN ISO 17025.

Analytical method: please indicate which analytical method has been used (GC-MS with derivatisation, GC-MS without derivatisation, LC-MS-MS or other) and give a short description of the sample preparation (e.g. clean-up procedure, etc.).

Details on proficiency tests: please give information on the organiser of the proficiency test, the number of the scheme, the number of the round, the matrix and the z-score (¹) achieved in the following short format: organiser/scheme/round/matrix/z-score. (Example: FAPAS/30/6/crispbread/1,6).

Acrylamide level: in µg/kg corrected for recovery.

Limit of detection: in µg/kg.

Limit of quantification: in µg/kg.

Measurement uncertainty: if available, please provide information on the measurement uncertainty (range to be given in %).

⁽¹⁾ Please note that the z-scores will only be used to judge the quality of the data. They will be kept confidential.