

## COMMISSION RECOMMENDATION

of 4 February 2005

## on the further investigation into the levels of polycyclic aromatic hydrocarbons in certain foods

(notified under document number C(2005) 256)

(Text with EEA relevance)

(2005/108/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

unclear. Production and processing methods should be used which prevent the initial contamination of crude oils with PAH,

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

HEREBY RECOMMENDS THAT MEMBER STATES:

Whereas:

- (1) Commission Regulation (EC) No 466/2001<sup>(1)</sup> sets maximum levels for polycyclic aromatic hydrocarbons (PAH), specifically benzo(a)pyrene, in certain foods. In view of remaining uncertainties on levels of carcinogenic PAH in foods the Regulation provides for a review of the measures by 1 April 2007. Information is required to inform that review.
- (2) The Scientific Committee on Food concluded in its opinion of 4 December 2002 that a number of polycyclic aromatic hydrocarbons (PAH) are genotoxic carcinogens. In view of the non-threshold effects of genotoxic substances the levels of PAH in foods should be reduced to as low as reasonably achievable. The Scientific Committee on Food concluded that benzo(a)pyrene could be used as a marker for the occurrence and effect of carcinogenic PAH in food, as listed in the Annex. Further analyses of the relative proportions of these PAH in foods is necessary, to inform a future review of the suitability of maintaining benzo(a)pyrene as a marker. Methods are available to test for multiple PAH.
- (3) PAH can be formed in foods during heating, drying and smoking processes which allow combustion products to come into direct contact with the food substance. Where high levels of PAH have been identified in foods, the methods of production and processing should be investigated. For example, direct fire-drying and heating processes used during the production of food oils, such as olive pomace oil, can result in high levels of PAH. Active carbon can be used to remove benzo(a)pyrene during the refining of oils, but whether refining processes effectively remove all PAH of concern is

1. Investigate the respective levels of benzo(a)pyrene and other polycyclic aromatic hydrocarbons (PAH), in particular those highlighted to be carcinogenic by the Scientific Committee on Food, as listed in the Annex<sup>(2)</sup>. Assess the relative proportions of these PAH in the foods listed in Regulation (EC) No 208/2005. Investigate also the levels of PAH in other foods that can contain high levels of PAH, such as dried fruits and food supplements. The level of each carcinogenic PAH measured in individual samples of specific foods should be reported. For example, the respective PAH levels measured in each single sample of olive pomace oil or sunflower oil or smoked fish (with name of species) or smoked ham, etc., should be given. The raw data will be collated and presented by the Commission. Communicate the results of the investigations to the Commission by 31 October 2006, to inform a review of the maximum levels and the suitability of maintaining benzo(a)pyrene as a marker, by 1 April 2007.
2. Investigate the production and processing methods used for food oils and fats. Where food oils and fats are produced using methods that may cause high levels of PAH contamination in the crude oil or fat, such as direct fire drying and heating processes, investigate with the producers alternative or optimised methods that would lower the levels. Report to the Commission by 31 October 2006 on findings and on progress to avoid the use of methods that can cause contamination.
3. Investigate the production and processing methods used for smoking and drying foods. Where methods are used that may cause high levels of PAH contamination, investigate with the producers alternative or optimised methods that would lower the levels. Report to the Commission by 31 October 2006 on findings and on progress to avoid the use of methods that can cause contamination.

<sup>(1)</sup> OJ L 77, 16.3.2001, p. 1. Regulation as last amended by Regulation (EC) No 208/2005 (see page 3 of this Official Journal).

<sup>(2)</sup> New information on PAH other than those highlighted by the Scientific Committee on Food are also welcomed where available if there are public health implications.

4. Investigate the presence and prevention of PAH in cocoa butter and report findings to the Commission by 31 October 2006. Information is required on the levels of benzo(a)pyrene and other PAH in cocoa butter, on the sources of this possible contamination and on possible ways to reduce the contamination. This information will be used to inform a review of the derogation for cocoa butter presently listed in Regulation (EC) No 208/2005.
5. Provide information from any other investigations into environmental sources of PAH contamination in foods.

Done at Brussels, 4 February 2005.

*For the Commission*  
Markos KYPRIANOU  
*Member of the Commission*

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## ANNEX

**Polycyclic aromatic hydrocarbons (PAH) highlighted to be carcinogenic by the Scientific Committee on Food (1), for which further investigation of the relative levels in certain foods is required:**

benz(a)anthracene

benzo(b)fluoranthene

benzo(j)fluoranthene

benzo(k)fluoranthene

benzo(g,h,i)perylene

benzo(a)pyrene

chrysene

cyclopenta(c,d)pyrene

dibenz(a,h)anthracene

dibenzo(a,e)pyrene

dibenzo(a,h)pyrene

dibenzo(a,i)pyrene

dibenzo(a,l)pyrene

indeno(1,2,3-cd)pyrene

5-methylchrysene.

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