

codex alimentarius commission

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FOOD AND AGRICULTURE
ORGANIZATION
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WORLD
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ORGANIZATION



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Agenda Item 13

CX/CF 07/1/16 Add.1
March 2007

**JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON CONTAMINANTS IN FOODS**

**First Session
Beijing, China, 16 - 20 April 2007**

**PROPOSED DRAFT CODE OF PRACTICE FOR THE REDUCTION OF CONTAMINATION OF
FOOD WITH POLYCYCLIC AROMATIC HYDROCARBONS (PAH) FROM SMOKING AND
DIRECT DRYING PROCESSES**

(N07-2006)

Comments at Step 3 submitted by Brazil, Ghana and Latvia

BRAZIL

Brazil thanks the electronic working group led by Denmark for this informative document, and considers that the text should be presented following the structure of a Codex Code of Practice, such as "Recommended International Code of Practice General Principles of Food Hygiene" (CAC/RCP 1-1969, Rev.4-2003).

GHANA

Ghana congratulates Denmark and all the other countries of the working group for their work in facilitating the development of the document.

REPORT OF THE WORKING GROUP

Page 2, paragraph 8

We suggest the removal of the letter 's' in the word 'gasses' in the sentence 'Furthermore, heavy metals are also found in combustion **gasses**' for sentence to read as follows:
'Furthermore, heavy metals are also found in combustion **gases**'.

Paragraph 49, 2nd line

'the combustion gasses' should be changed to 'combustion gases'

INTRODUCTION

Page 3

We prefer the amendment of the sentence below found on page 3 paragraph 2, 3rd sentence 'JECFA recommended keeping the content of these contaminants in food as low as reasonable achievable' to read as follows:

'JECFA recommended keeping the content of these contaminants in food as low as **reasonably achievable**'.

Paragraph 3

We suggest the replacement of the word ‘of’ with ‘on’ in the sentence ‘The PAH content of thermally treated food differs depending of the processes used and how they are conducted.’ For the sentence to read as follows:

‘The PAH content of thermally treated food differs depending **on** the processes used and how they are conducted’.

Paragraph 6, 2nd sentence

We prefer the cancellation of the word ‘either’ in sentence ‘This contamination should be controlled either by source-directed measures like filtering the smoke from relevant industries (e.g., cement work, incinerator and metallurgy) and limiting the exhaust of PAH from cars. For sentence to read as follows:

‘This contamination should be controlled by source-directed measures like filtering the smoke from relevant industries (e.g., cement work, incinerator and metallurgy) and limiting the exhaust of PAH from cars’.

On the other hand, the word ‘or’ can be introduced in addition to the word ‘**either**’ in the sentence to read as follows:

‘This contamination should be controlled **either** by source-directed measures like filtering the smoke from relevant industries (e.g., cement work, incinerator and metallurgy) **or** limiting the exhaust of PAH from cars’.

Paragraph 6, 3rd sentence

Ghana suggests the amendment of the sentence ‘**Good agricultural practices (GAPs), when growing crops and when selecting appropriate farmland, could also decrease the environmental contamination of foods with PAH, together with not harvesting shellfish from contaminated water**’. For sentence to read as follows:

‘**Good agricultural practices (GAPs), including the selection of appropriate farmland, could also decrease the environmental contamination of foods with PAH. Harvesting of shellfish from contaminated water should be avoided**’.

Page 5, Paragraph 22

We prefer the addition of the phrase “in developing countries” to the end of the sentence: “Smoking is now primarily used to achieve the characteristic taste and appearance of smoked food, with preservation playing a minor role’ for sentence to read as follows:

Smoking is now primarily used to achieve the characteristic taste and appearance of smoked food, with preservation playing a minor role **in developing countries**.

Page 6, Paragraph 37 2nd line

We would be grateful if ‘old tires’ as it appears in the phrase ‘In any event, fuels like e.g., diesel, old tires or waste oil should generally not be used’ is clarified. Is it old tyres or tires?

Page 7, paragraph 41

We suggest the replacement of ‘**particular**’ with ‘**particulate**’ in the phrase “As PAH are particular bound,’. For phrase to read as follows: ‘As PAH are particulate bound’,

Page 7, paragraph 43

Replace ‘of’ with ‘on’, Delete the phrase ‘and the temperature’ in the sentence ‘The composition of the smoke depends of the temperature, and the temperature should be adjusted to minimize PAH formation’. For phrase to read as follows:

‘The composition of the smoke depends **on** the temperature **which** should be adjusted to minimize PAH formation’

Page 7, paragraph 45

We prefer rephrasing of this section to read as follows:

Summary of COP and critical points:

PAH content of smoked ‘foods’ can be minimised by

- a. **Using** hard wood rather than soft wood to generate smoke
- b. **Avoiding** the use of fuels as diesel fuel, waste products, especially tyres and waste oil which may already contain significant levels of PAH
- c. **Using** indirect smoking when possible instead of direct smoking
- d. **Prior assessment of smoke generators by taking account of the resulting PAH content in the smoke**
- e. **Filtering** or **cooling** the smoke where possible
- f. **Washing** or **water-cooling** products after smoking where possible
- g. **Reducing** the time that food is in contact with smoke

Page 9

Paragraph 59

We propose an amendment of the sentence ‘Sun drying with crops exposed directly to the sun/air should not take place near industrial point sources of combustion off-gas, such as incinerators, coal-fired power stations, cement works etc.’. For sentence to read as follows:

‘Sun drying of crops should not take place near industrial point sources of combustion **of -gas**, such as incinerators, coal-fired power stations, cement works etc’.

Replace pods with beans in ‘cacao pods’ to read as ‘cacao beans’.

Paragraph 61

We suggest the amendment of the sentence ‘It is recommended to make a risk assessment of the fuel....’ as follows: ‘It is recommended to conduct a risk assessment of the fuel....’

Paragraph 62

We would be grateful if some clarification of the other types of fuel being referred to is provided here. Examples could be cited.

Paragraph 64

We prefer the replacement of ‘has’ with ‘as’, ‘to’ with ‘the’ , ‘with’ replaced with ‘to’ and ‘potential’ with ‘potentially’ in the sentence ‘The drying time should be as short as possible to decrease to exposure of the food with the potential contaminating gasses as much as possible’. For sentence to read as follows:

‘The drying time should be as short **as** possible to decrease **the** exposure of the food **to the potentially** contaminating gasses as much as possible’

Paragraph 65

Summary of COP and critical points:

PAH content of dried foods can be minimised by

- a. Make a risk assessment of the fuel used in contact with the foods to be dried
- b. Do not use diesel fuel, waste products, especially waste oil or old tyres which may already contain significant levels of PAH
- c. Do not dry near industrial point sources of combustion off-gas, such as incinerators, coal-fired power stations, cement works etc.
- d. Reduce the time that food is in contact with combustion gasses
- e. Keeping equipment clean and well maintained (especially driers).

The above could be amended to read as follows:

Summary of COP and critical points:

PAH content of dried foods can be minimised by

- a. **Conducting** a risk assessment of the fuel used in contact with the foods to be dried

- b. **Avoiding** the use of diesel fuel, waste products, especially waste oil or old tyres which may already contain significant levels of PAH
- c. **Not drying** near industrial point sources of combustion **of-gas**, such as incinerators, coal-fired power stations, cement works etc.
- d. **Reducing** the time that food is in contact with combustion gasses
- e. Keeping equipment clean and well maintained (especially driers).

LATVIA

Latvia would like to submit the following comments to CX/CF07/1/16.

General comment:

Taking into account that some countries (EU, Russia etc.) have already set maximum levels of benzo(a)pyrene in their national legislation and taking into account that maximum levels for same types of products are differing from country to country, that has a negative impact on international trade, Latvia would like to incorporate the guidelines for setting of maximum levels of benzo(a)pyrene in different types of products as the basis for coordination of legislations between countries into the **Draft Code of Practice for the reduction of contamination of food with polycyclic aromatic hydrocarbons from smoking and direct drying processes**.

Latvia also proposes to use maximum limits for benzo(a)pyrene, which are set in Annex, Section 6 of Commission Regulation No. 1881/2006, as a basis for further discussions.

Regarding point 30:

To add a subpoint:

- Filtering of smoke;

To add a subpoint:

- Cleaning regime of smoking chamber and equipment.

Regarding point 33:

To add after 2nd sentence:

Benzo(a)pyrene reaches the highest concentration upon application of spruce, hazel-tree, plum-tree and aspen, whereas the lowest concentration was brought about by apple-tree, alder and maple (Jākabsone and Bartkevics, 2006).

Regarding point 41:

To add after 2nd sentence:

Ultraviolet radiation could be used to reduce the content of benzo(a)pyrene in smoked products (Jākabsone and Bartkevics, 2006).

References:

To add below two references:

1. Jākabsone I., Bartkevics V. (2006) Changes in the content of polycyclic aromatic hydrocarbons present in oils and meat under impact of technological processes. *Study was supported by the Ministry of Agriculture of Latvia, Grant contract No. 270606/S318.*
2. Joffe R., Bartkevics V. (2003) Determination of benzo(a)pyrene content in fish, fish products and in auxiliary materials used in production. *Study was supported by the Ministry of Agriculture of Latvia, Grant contract No. 250603/S145.*

To add in the Table 1:

Food item	Indirect	Direct	Other	Reference
Canned smoked fish	2,2 (n = 119)	13,4 (n = 30)		Joffe and Bartkevics, 2003