

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
United Nations



World Health
Organization

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TO: Codex Contact Points
Contact Points of international organizations having observer status with Codex

FROM: Secretariat, Codex Alimentarius Commission,
Joint FAO/WHO Food Standards Programme

SUBJECT: Request for comments and/or information on sampling plans: Maximum levels for total aflatoxins and ochratoxin A in spices

DEADLINE: **30 September 2022**

BACKGROUND

1. CCCF15 considered maximum levels (MLs) for total aflatoxins (AFT) and ochratoxin A (OTA) in certain spices as well as the appropriateness of the sampling plan¹ ISO 948. CCCF noted that this sampling plan was not appropriate for the control of heterogeneously distributed contaminants, such as AFT and OTA and that the sampling plan had a number of shortcomings. CCCF also noted an alternative sampling plan² addressing the shortcomings.
2. CCCF agreed that further work was necessary to develop a sampling plan that should also take into account the MLs to be established. CCCF agreed to circulate the sampling plan submitted to CCCF15 for comments and to call for information on other sampling plans. For convenience, the sampling plan presented in CRD16 is attached to this circular letter.³

REQUEST FOR COMMENTS

3. In order to assist the EWG on MLs for AFT and OTA in spices, Codex members and observers are invited to consider:
 - a. the appropriateness of the attached sampling plan; and/or
 - b. points that need to be taken into account that can improve the attached sampling plan to ensure appropriateness for the MLs on AFT and OTA in spices; or
 - c. to provide information on other sampling plans.
 - Information available through links should be provided through the OCS.
 - Information available through attachments (preferable word file) should be provided to the Codex Secretariat by email: codex@fao.org
4. The aforementioned sampling plan is uploaded to the Codex Online Commenting System (OCS): <https://ocs.codexalimentarius.org/>, as per the guidance below.

GUIDANCE ON THE PROVISION OF COMMENTS

5. Comments should be submitted through the Codex Contact Points of Codex members and observers using the OCS.
6. Contact Points of Codex members and observers may login to the OCS and access the document open for comments by selecting "Enter" in the "My reviews" page, available after login to the system
7. Other OCS resources, including [Frequently Asked Questions \(FAQs\)](#)-as well as the user manual and short guide, can be found at the following link: <http://www.fao.org/fao-who-codexalimentarius/resources/circular-letters/en/>
8. For questions on the OCS, please contact Codex-OCS@fao.org.

¹ All working documents for CCCF15, including those listed in the footnotes, are available at: <https://www.fao.org/fao-who-codexalimentarius/meetings/detail/en/?meeting=CCCF&session=15>
CX/CF 22/15/11

² CRD16

³ REP22/CF15, paras. 181-193

ANNEX
(English only)

A) Spices with large particle size

In case of large lots and on condition that the subplot can be separated physically, each lot shall be subdivided into sublots following table 1. Taking into account that the weight of the lot is not always an exact multiple of the weight of the sublots, the weight of the subplot may exceed the mentioned weight by a maximum of 20 %.

Table 1

Subdivision of lots into sublots depending on product and lot weight

Commodity	Lot weight (tonne)	Weight or number of sublots	No incremental samples	Aggregate sample weight (kg)
spices with large particle size	≥ 500	100 tonnes	100	20
	> 125 and < 500	5 sublots	100	20
	≥ 15 and ≤ 125	25 tonnes	100	20
	< 15	—	10-100 (*)	≤ 20
(*) Depending on the lot weight — see table 2.				

- Each subplot shall be sampled separately
- Number of incremental samples: 100
- Weight of the aggregate sample = 20 kg which shall be mixed and to be divided into two equal laboratory samples of 10 kg before grinding.
- Each laboratory sample of 10 kg shall be separately ground finely and mixed thoroughly to achieve complete homogenisation

(*) The number of incremental samples of 100 g to be taken depends on the weight of the lot, with a minimum of 10 and a maximum of 100.

The figures in the following table 2 may be used to determine the number of incremental samples to be taken and the subsequent division of the aggregate sample.

Table 2

Number of incremental samples to be taken depending on the weight of the lot and number of subdivisions of the aggregate sample

Lot weight (tonnes)	No of incremental samples	Aggregate sample Weight (kg)	No of laboratory samples from aggregate sample
≤ 0,1	10	2	1 (no division)
> 0,1 – ≤ 0,2	15	3	1 (no division)
> 0,2 – ≤ 0,5	20	4	1 (no division)
> 0,5 – ≤ 1,0	30	6	1 (no division)
> 1,0 – ≤ 2,0	40	8 (- < 12 kg)	1 (no division)
> 2,0 – ≤ 5,0	60	12	2
> 5,0 – ≤ 10,0	80	16	2
> 10,0 – ≤ 15,0	100	20	2

- Weight of the aggregate sample ≤ 20 kg which shall be mixed and if necessary divided into two equal laboratory samples of ≤ 10 kg before grinding
- In cases where the aggregate sample weights are less than 20 kg, the aggregate sample shall be divided into laboratory samples according to following guidance:
 - < 12 kg: no division into laboratory samples;
 - ≥ 12 kg division into two laboratory samples.
- Each laboratory sample shall be separately ground finely and mixed thoroughly to achieve complete homogenisation

Decision rule: If the aflatoxin test result is less than or equal to the ML in both test samples, then accept the lot. Otherwise reject the lot.

B) Spices with small particle size

In the case of large lots and on condition that the subplot can be separated physically, each lot shall be subdivided into sublots following Table 3. Taking into account that the weight of the lot is not always an exact multiple of the weight of the sublots, the weight of the subplot may exceed the mentioned weight by a maximum of 20 %.

Table 3

In case of large lots , subdivision of lots into sublots depending on product and lot weight

Commodity	Lot weight (tonnes)	Weight or number of sublots	Number of incremental samples	Aggregate sample Weight (kg)
Spices	≥ 15	25 tonnes	100	10
	< 15	—	5-100 (*)	0,5-10
(*) Depending on the lot weight — see Table 4				

- Each subplot shall be sampled separately.
- Number of incremental samples: 100. Weight of the aggregate sample = 10 kg.

(*) For lots of spices less than 15 tonnes the sampling plan shall be used with 5 to 100 incremental samples, depending on the lot weight, resulting in an aggregate sample of 0,5 to 10 kg.

The figures in the following Table 4 can be used to determine the number of incremental samples to be taken.

Table 4

Number of incremental samples to be taken depending on the weight of the lot of spices

Lot weight (tonnes)	Number of incremental samples	Aggregate sample weight (kg)
$\leq 0,01$	5	0,5
$> 0,01-\leq 0,1$	10	1
$> 0,1-\leq 0,2$	15	1,5
$> 0,2-\leq 0,5$	20	2
$> 0,5-\leq 1,0$	30	3
$> 1,0-\leq 2,0$	40	4
$> 2,0-\leq 5,0$	60	6
$> 5,0-\leq 10,0$	80	8
$> 10,0-\leq 15,0$	100	10