

# CODEX ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization

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**Agenda Item 7**

**CRD26**

**May 2022**

**ORIGINAL LANGUAGE ONLY**

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

**15th Session  
Virtual  
9-13 and 24 May 2022**

(Prepared by Brazil as Chair of the EWG)

1. Brazil, as chair of the electronic working group on the discussion for Maximum levels for lead in certain food categories, reviewed data considering comments received in reply to CL 2022/16-CF and made new proposals, aiming to facilitate discussions at the plenary of CCCF15 meeting.
2. For fresh eggs, the proposal is to discontinue work considering low impact on international trade and low occurrence levels observed.
3. For cereal-based food for infants and young children and ready-to-eat meal food for infants and young children, the data supports the MLs being proposed with a rejection rate of less than 5%.
4. For culinary herbs, it is being proposed to discontinue work considering the low impact on international trade. For dried culinary herbs and dried spices, the proposal is to further work on data, with the discontinuation of the work on dried garlic considering that a ML for fresh garlic is already established in CXS 193-1995.
5. For white sugars, syrups and honey; the data supports a single ML. For molasses, it is proposed to discontinue work due to low sample size available. For brown and raw sugars, it is proposed to further work on data.
6. It is proposed to establish a single ML for all candies, discontinuing work on candy powders (sample from only one country).
7. The presentation on agenda item 7 and the new proposals is made available below.



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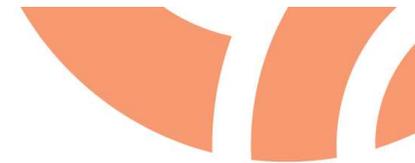
**CODEX**  
**ALIMENTARIUS**  
INTERNATIONAL FOOD STANDARDS

# CCCCF15

CODEX COMMITTEE  
ON CONTAMINANTS  
IN FOOD

**Agenda item 7. Maximum levels for lead in  
certain food categories (at Step 4)**

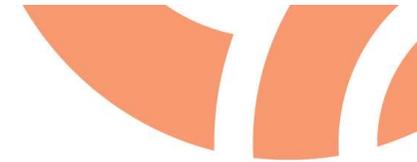




## Background

- 73rd JECFA Meeting no safe level of lead, measures to reduce dietary exposure
- CCCF11 (2017): ewg to identify and prioritize food categories
- CCCF12 (2018): ewg to consider exposure data when prioritizing
- CCCF13 (2019): agreed on the selection and prioritization criteria; ewg focus on:
  - Food for infants and young children;
  - Spices and aromatic herbs;
  - Eggs
  - Sugars and confectionery, excluding cocoa
- CCCF14 (2021): ewg to consider decisions made; present a broader range of MLs and rejection rates aiming to finalize the MLS for the following year

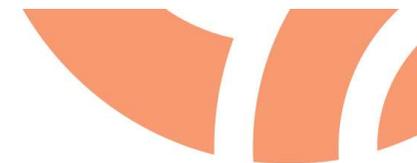




## Work process

- Call for data issued;
- Food categories decided by CCCF14
- Occurrence data extracted from GEMS/Food database (2011 – 2021)
- Summary statistics were calculated considering the raw dataset for each category and subcategories as agreed by CCCF14
- Data analyzed (n= 17,249)
  - 2,024 for eggs
  - 3,409 for culinary herbs and 5,244 for spices
  - 7,369 for sugar and confectionary
  - 4,447 for food for infant and young children (cereal-based and read-to-eat)

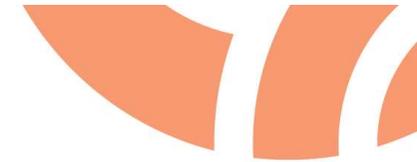




## What changed from last document ?

- Time frame (2008 to 2019 x 2011 to 2021)
- 2021: samples from 14 countries and one region: Australia, Brazil, Belgium, Canada, Cuba, China, France, India, Indonésia, Japan, Nigeria, New Zeland, Republic of Korea, Singapore, Thailand, USA, WHO European Union
- 2022: samples from 42 countries and two regions: Afghanistan, Australia, Brazil, Bulgaria, Canada, Comoros, Cuba, China, Ecuador, Egypt, France, Germany, Greece, Guatemala, Honduras, Hungary, India, Indonesia, Iran, Jamaica, Japan, Kenya, Malaysia, Mexico, Nigeria, New Zealand, Peru, Republic of Korea, Saudi Arabia, South Africa, Singapore, Spain, Sri Lanka, Syrian Arab Republic, Thailand, The Former Yugoslav Republic, Turkey, Ukraine, USA, Uruguay, Viet Nan and Zambia , WHO European Union, African Region
- Adoption of stricter exclusion criteria (following the recommendations of the “*GUIDANCE ON DATA ANALYSIS FOR DEVELOPMENT OF MAXIMUM LEVELS AND FOR IMPROVED DATA COLLECTION*”)

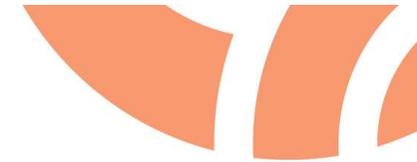




## Work process

- Rejection rate less than 5%
- ML for food categories with  $n > 20$  (Guidance on data analysis for development of maximum levels and for improved data collection document: minimum sample size to calculate high percentiles values)
- Hypothetical MLs vs rate of sample rejection
- Consideration of analytical methodologies (LOQ/LOD vs proposed MLs)
- Samples not clearly identified: not considered
  - Results reported “dry weight basis” that could not be converted on “as consumed” or “as is” basis were not considered





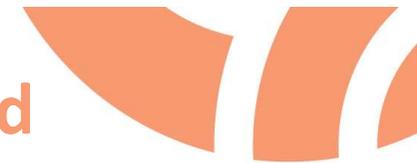
## Key points and recommendations – fresh eggs

Establish a ML of 0.25 mg/kg for fresh eggs (chicken and ducks) considering the performance criteria of Codex Alimentarius Procedural Manual and the fact that the methods used to analyse 95% of the egg samples had a Limit of Quantification (LOQ) of 0.05 mg/kg

or

**to not establish a maximum level (ML) for fresh eggs, considering their low relevance for international trade and the low occurrence levels observed;**





## Key points and recommendations – cereal-based food for infants and young children

Establish the following ML for food for infants and young children:

Food	ML (mg/kg)	n	Rejection rate (%)
Cereal-based products for infants and young children, expressed “as is”	0.05	634	1.3

Comments in reply to CL 2022/16-CF:

- Some members are the opinion that the ML is too high, but no ML was proposed
- Removing samples with LOD > 0.02 mg/kg:
  - ML of 0.02 mg/kg would reject less than 5% of the samples
  - **ML of 0.02 mg/kg to be considered**



## Key points and recommendations – ready-to-eat meals for infants and young children

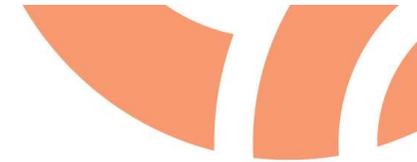
Establish the following ML for food for infants and young children:

Food	ML (mg/kg)	n	Rejection rate (%)
Ready-to-eat meals for infants and young children	0.05	3,738	1.0

Comments in reply to CL 2022/16-CF:

- Some members are of the opinion that the ML is too high
- Rejection rate higher than 5% could be accepted considering the vulnerability of the population
- Removing samples with LOD > 0.02 mg/kg:
  - ML of 0.02 mg/kg would reject less than 5% of the samples
  - **ML of 0.02 mg/kg to be considered**





## Key points and recommendations – culinary herbs

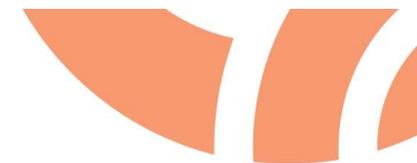
Establish the following MLs for culinary herbs (fresh and dried)

Food	ML (mg/kg)	n	Rejection rate (%)
Culinary herbs (fresh) (except Rosemary)	0.25	1,452	4.5
Rosemary (fresh)	0.5	167	3.0
Culinary herbs (dried)	2.0	1,012	5.1

Comments in reply to CL 2022/16-CF:

- Not possible to propose another ML
- Not establish MLs for **fresh culinary herbs**: discontinue work/low impact on international trade
- Considering that it was observed inconsistencies in the data presented, it is proposed to issue another call for data for **dried culinary herbs** and provide a new data analysis for the next meeting



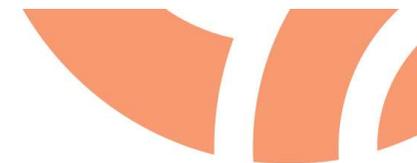


## Key points and recommendations - spices

Considering comments in reply to CL 2022/16-CF:

- Not establish ML for dried garlic:
  - ML of 0.1 mg/kg for fresh garlic in CXS 193-1995
  - Discontinue work
- Considering that it was observed inconsistencies in the data presented, it is proposed to issue another call for data for **dried spices** and provide a new data analysis for the next meeting



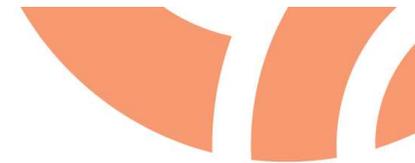


## Key points and recommendations - sugars

Establish the following MLs for sugars:

Food	ML (mg/kg)	n	Rejection rate (%)
Sugar, white and refined	0.1	1,148	0.78
Sugar, brown and raw	0.1	94	3.2
Honey	0.06	3,601	4.4
Corn and maple syrups	0.1	57	0
Molasses	0.3	20	5.0





## Key points and recommendations - sugars

Comments in reply to CL 2022/16-CF:

- General support on ML of 0.1 mg/kg for all sugars and 0.06 mg/kg for honey
- Considerations of ML of 0.1 mg/kg for honey due to analytical methods

Sugar data were revised based on the comments received

For any sugar, rejection rates are less than 5% with a hypothetical ML of 0.1 mg/kg

- **ML of 0.1 mg/kg for white sugars, syrups and honey (rejection rates less than 5%)**
- **Not establish ML for molasses/low sample size (n=20)**
- **Revise proposal of ML for raw and brown sugars**



## Key points and recommendations – sugar-based candies

Establish the following MLs for sugar-based candies:

Food	ML (mg/kg)	n	Rejection rate (%)
Hard candies, Gummy and jellies	0.05	700	4.4
Soft candies	0.07	98	2.0
Candy powder	0.2	65	4.6

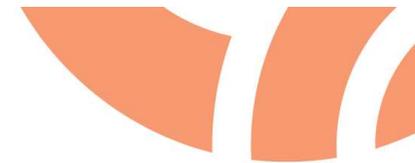
Comments in reply to CL 2022/16-CF:

- No consensus on the ML proposed

**Not establish ML for candy powder (data for only one country)**

**Establish a single ML for candies: 0.1 mg/kg**





**Thank you**



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