



23rd Meeting of the Codex Contact Points in the Arab Region

ANALYSIS OF AGENDA ITEMS IN PREPARATION FOR THE 17th SESSION OF THE CODEX COMMITTEE ON CONTAMINANTS IN FOOD (CCCF17)



Agenda Item 13:

DISCUSSION PAPER ON LEAD AND

CADMIUM IN QUINOA

CX/CF 24/17/13



Presented by Dr. Muna Al-Olan, The State of Qatar

Background

The existing MLs for Pb and Cd in cereals in the General Standard for Contaminants in Food and Feed (CXS 193-1995) explicitly exclude quinoa.

CCCF12 (2018) noted that since quinoa was a pseudo-cereal and the growing conditions were different, it might be appropriate to consider quinoa separately.

CCCF16 (2023) requested the JECFA Secretariat to review the request based on an analysis of new data collected through a call for data on Cd and Pb in quinoa and quinoa-based products.

September 2023: the JECFA Secretariat issued a request for data on Cd and Pb in quinoa and quinoa-based products, including foods for infants and young children.

Occurrence Data

Pb: 529 results

Cd: 516 results

1045 data points in total

Fair geographical representativeness

Occurrence Data

Cd

ML of 0.1 mg/kg rejection rate of 4.7%

ML of 0.2 mg/kg rejection rate of 0.2%

Pb

ML of 0.1 mg/kg rejection rate of 3.8%

ML of 0.2 mg/kg rejection rate of 0.4%

Consumption Data

Consumption data

Currently there is no food item related to quinoa consumption as such identified in the GEMS/Food classification in cluster diets.

Limited data was acquired from the FAO/WHO Chronic Individual Food Consumption database (CIFOCOss).

Limited data from FAO/Stat Food Supply Utilization Accounts

Dietary Exposure Estimates

Results showed that enforcing an ML of 0.1 or 0.2 mg/kg for quinoa would have little impact on dietary exposure to cadmium for the general population, compared with the current situation with no Codex ML.

Same conclusion for lead where results showed that enforcing an ML of 0.1 or 0.2 mg/kg for quinoa would have little impact on dietary exposure to lead for the general population, compared with the current situation with no Codex ML.

Conclusion and Recommandations



- The discussion paper presents enough data-driven evidence to establish MLs for both cadmium and lead in quinoa, although further efforts might be deployed for the collection of additional consumption data specific to this commodity.
- The analysis performed by the JECFA indicates that MLs might not be needed for cadmium and lead in quinoa, since minor improvements were noticed as for the reduction of dietary exposures to these heavy metals.
- The state of Qatar might not object on the proposed MLs of 0.1 mg/kg for lead and cadmium in quinoa (grain, seed and flour), although the need to develop an ML has not yet been attained.

