

# SAFEGUARDS

## CONSUMER GOODS AND RETAIL

FOOD

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## CODEX ALIMENTARIUS SETS NEW MAXIMUM LEVELS FOR SOME HEAVY METALS

During the Codex Alimentarius Commission (CAC) annual meeting, attended by 170 countries, the European Union and 30 international governmental and non-governmental organizations, the CAC advised that they had reduced the maximum standard for lead in infant formula and had set a maximum standard for arsenic in rice.<sup>1</sup>

### LEAD IN INFANT FORMULA AND ARSENIC IN RICE

The CAC previously established a maximum lead standard in infant formula as listed in the Codex General Standard for Contaminants and Toxins in Food and Feed Codex Stan 193-1995 of 0.02 mg/kg.<sup>2</sup> During the 2014 annual meeting this maximum standard was adapted to 0.01 mg/kg. This is being done because there is scientific evidence that infants and children are more vulnerable to the toxic effects of lead, particularly affecting the development of the brain and nervous system which can diminish their ability to learn. Lead is found in the environment naturally and as a contaminant from industrial processes. Lead levels in products can be controlled by utilizing raw materials from areas where less lead is present.

In addition to reducing the maximum level standard of lead in infant formula, the CAC for the first time set a maximum level standard for arsenic in rice at 0.2 mg/kg. Arsenic is naturally and anthropogenically present in the groundwater and soils of the world. However, in some parts of the world arsenic can be found at very high levels. Long-term exposure to arsenic can cause cancer and has also been associated with heart disease, diabetes and developmental effects by damaging the nervous system and brain. The arsenic is taken up by the plants through irrigation or flooding of rice seedlings with ground water or through soil that is high in arsenic.

Testing for trace levels of lead, arsenic and other heavy metals in food is typically performed using an Inductively Coupled Plasma Mass Spectrometer (ICP-MS).



<sup>1</sup> [FAO](#)

<sup>2</sup> [Codex Standard 193-1995](#)

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