

Root-vegetable purées: HMTc Standard

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KEYWORDS

heavy metals, food safety, dietary exposure

PUBLICATION HISTORY

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CORRESPONDENCE

Corrections are logged publicly on the article page, each with its date, the affected value, and the source that resolved it.

Abstract

The Heavy Metal Tested & Certified standard for single-ingredient root-vegetable purées for infants and young children, stated as-consumed. Root vegetables concentrate soil metals, and the lead limit reflects the applicable government maximum for that product form. Every limit is the strictest maximum level any credible government sets, converted to the as-consumed basis, with read-across where no government regulates the exact product.

1 | How every number on this standard is set

HMTc Method v2.0 (government-limit default, 8:1 basis, read-across)

2 | Master limit table

All values in ppb (µg/kg), as consumed basis. A brand meeting every value qualifies for the mark.

ANALYTE	TIER	HMTc LIMIT	BASIS
Lead (Pb)	Tier 1	20	government maximum level
Cadmium (Cd)	Tier 1	40	government maximum level
Total arsenic (tAs)	Tier 2	50	human-grade read-across (India)

Inorganic arsenic (iAs)	Tier 1	20	government maximum level
Mercury, total (tHg)	Tier 1	8	human-grade read-across (Israel)
Methylmercury (MeHg)	Tier 1	—	not compiled
Nickel (Ni)	Tier 2	500	government maximum level
Tin (Sn)	Tier 2	5,000	human-grade read-across (India)
Aluminium (Al)	Tier 2	500	human-grade read-across (Australia / New Zealand)
Total chromium (Cr)	Tier 2	500	government maximum level
Hexavalent chromium (Cr-VI)	Tier 2	—	not compiled

3 | Derivation – where each number comes from

Every cell traces to one named sovereign maximum level (the strictest for the nearest analog), or to an explicit control, not-material, or species-bounded determination. No occurrence statistic selects a certification value.

ANALYTE	HMTC	SOVEREIGN ANALOG / DETERMINATION
Lead (Pb)	20	government maximum level
Cadmium (Cd)	40	government maximum level
Total arsenic (tAs)	50	India — human-food analog
Inorganic arsenic (iAs)	20	government maximum level
Mercury, total (tHg)	8	Israel — human-food analog
Methylmercury (MeHg)	—	not compiled
Nickel (Ni)	500	government maximum level
Tin (Sn)	5,000	India — human-food analog
Aluminium (Al)	500	Australia / New Zealand — human-food analog
Total chromium (Cr)	500	government maximum level
Hexavalent chromium (Cr-VI)	—	not compiled

4 | Cite this standard

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References

- [1] Australia / New Zealand — human-food maximum levels
Binds Al. Strictest applicable human-food sovereign maximum for the nearest analog.
MAXIMUM LEVEL
- [2] Israel — human-food maximum levels
Binds tHg. Strictest applicable human-food sovereign maximum for the nearest analog.
MAXIMUM LEVEL
- [3] India — human-food maximum levels
Binds tAs, Sn. Strictest applicable human-food sovereign maximum for the nearest analog.
MAXIMUM LEVEL

STATUS AND LICENCE

A normative certification standard, editorially reviewed and version-controlled in-house; every value traces to a named sovereign maximum level, disclosed in the derivation. © 2026 Institute of Contaminant Standards / Heavy Metal Certified. All rights reserved.

DATA AVAILABILITY

The works this reference draws on are listed in full in the references above and on the briefing page at <https://heavymetalcertified.com/standards/root-vegetable-purees>. Primary legal instruments and expert-body assessments are named with their public identifiers; the underlying occurrence and toxicology corpus is maintained on the Heavy Metal Index.

COMPETING INTERESTS

This briefing is published by the Heavy Metal Tested & Certified (HMTc) program, operated by the Institute of Contaminant Standards. Its statements about government regulations, toxicology, and occurrence are sourced to the cited primary and expert-body records and to the independently maintained Heavy Metal Index; the program's own certification thresholds are not used as evidence for any factual claim made here.

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