



A SPOONFUL OF LEAD

Spices as a Potential Source of Lead Exposure

LEAD LEVELS BY TYPE OF SPICE

1496 samples of 50+ spices from 41 countries were tested and more than 50% (797) had detectable lead. Kviteli kvavili (yellow flower or Georgian saffron), kharcho suneli, svanuri marili, soup spice, utskho suneli (fenugreek), adjika, curry, turmeric, masala, and chili powder had some of the highest lead concentrations.



LEAD LEVELS BY COUNTRY OF PURCHASE

Average lead content in spices was significantly higher for those purchased abroad than in the US. The spices with the highest lead concentrations were purchased in the countries Georgia, Bangladesh, Pakistan, Nepal, and Morocco.

CONTAMINATION ALONG SUPPLY CHAIN

Lead may be added as a coloring agent, to add weight for products sold by weight or introduced due to poor processing equipment; the presence of lead in air, dust, or soil where food is grown or processed can also contribute towards contamination.



IMPLICATIONS FOR POLICY & PRACTICE

Local, federal, and international governmental entities should develop and enforce stricter regulations that safeguard the integrity of global food supplies. Medical providers should consider spices as a potential source of lead when assessing their patients' risk factors for lead exposure, especially for those with Georgian, Moroccan, or South Asian ancestry.

Source: Hore, P; Alex-Oni, K; Sedlar, S; Nagin, D. A Spoonful of Lead: A Ten-Year Look at Spices as a Potential Source of Lead Exposure. *J Public Health Manag Pract.* 2019 Jan-Feb; 25(1): 63-70. doi:10.1097/PHH.0000000000000876.