Understanding Heavy Metals:

Key Findings from Interviews of Parents with 4-12-Month-Old Infants

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> 75% of respondents select

'How heavy metals get in

food' and/or 'how to reduce

component of the infographic

> 86% of parents are interested

in learning more about this

Bullet points and clear action

items (e.g., tips and expert

recommendations) scored

Respondents agreed they had

learned a lot of information

> A visual infographic designed

understanding heavy metals

knowledge regarding dietary

variety as a key strategy to

help minimize heavy metal

exposure in children's diets.

to educate parents about

in foods can help increase

parents' confidence and

from the infographic.

the highest in net-

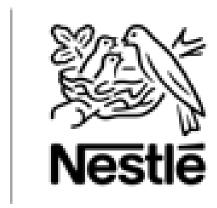
understanding.

the risk of heavy metals' as

the most compelling

Key Findings

topic.



Background

- Complementary feeding guidance is essential to meet the nutrition needs of infants and young children while minimizing exposure to heavy metals found in the environment.
- The FDA Closer to Zero Action Plan and other stakeholders work collaboratively to advance this important effort to continue to further reduce the levels of heavy metals in foods eaten by infants and young children.
- Education materials for parents can be beneficial to help parents understand what heavy metals are, how heavy metals get into foods, and how to reduce exposure to heavy metals from foods.

Objectives

Conduct parent interviews to ensure an infographic on heavy metals is understandable and educational.

Methods

- > Data were collected in December 2022.
- > A sample of 100 parents with infants 4-12 months.
- > The interviews were conducted online, and the data were weighted to approximate a target sample of adults based on gender, educational attainment, age, race, and region.
- Results from the full survey have a margin of error ± 10 percentage points.

Results

- > Approximately 67% of respondents had awareness about heavy metals and foods.
- > Prior to education, making homemade food was seen as the best way to reduce exposure to heavy metals.
- More than 70% of parents saw the images and messages as positive.
- Top learnings from the infographic (>20-point change pre/post education):
- Importance of thoroughly washing food to reduce heavy metal exposure.
- Eating lots of different foods to reduce exposure.
- Making homemade baby food does not reduce exposure.

Do homemade foods have less heavy metals? (>)

While both are safe and nutritious, a recent report shows that homemade baby foods are **not** lower in heavy metals than store-bought baby foods.





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✓ Remove the outer peel where heavy metals may concentrate ✓ Cook rice in extra water then drain (like pasta!)



Whether homemade or store-bought, vary the types of fruits, vegetables and grains

Fe Don't skip iron-fortified baby cereal, an important source of iron & zinc!

Adequate iron status can help protect against absorbing heavy metals from food

Experts recommend:

- ✓ Feeding a variety of nutrientdense foods like fruits, vegetables and whole grains
- ✓ Including infant cereals, an important source of iron and zinc, made from a variety of
- Choosing fish known to be lower in mercury



A well-nourished child is better protected

from absorbing the heavy metals

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- Removing skin from produce to reduce exposure.

What are heavy metals?

Heavy metals refers to the elements arsenic, cadmium, lead, and mercury. Exposure may come from foods or other sources



Heavy metals can come from a variety of sources:

- ✓ Arsenic: Soil and water ✓ Cadmium: Soil and water
- ✓ Lead: Soil, air and water

✓ Mercury: Water

Exposure to heavy metals

is of particular concern to

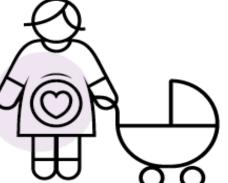
Crops grown in the ground

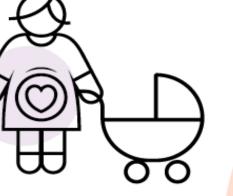
or with excess water

can be more likely to take up

heavy metals; certain fruits,

elements as they grow

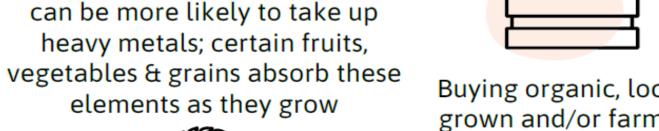




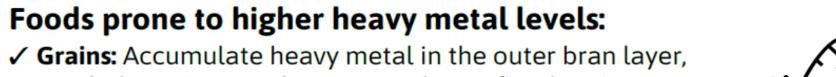
parents and young children



Buying organic, locally grown and/or farmer's market foods does not contain heavy metals



change whether the foods



- so whole grains may have more than refined grains ✓ Rice: Takes up arsenic from being grown in flooded fields
- ✓ Leafy vegetables: Absorb cadmium from soil and water ✓ Root vegetables: Like carrots & sweet potatoes, absorb lead from soil
- ✓ Fatty fish: Like salmon, tuna, & mackerel, absorb mercury from water in their fatty tissue



Heavy metals are found in the environment, including the soil and water, and certain crops and animals absorb these elements as they grow.

Tips for reducing exposure to heavy metals when feeding children: ✓ Make sure water supply has been checked for lead

- ✓ Wash hands and foods to remove residual lead from dirt and dust
- ✓ Include foods rich in iron and zinc, especially when breastfeeding or mixed feeding
- ✓ Choose snacks made with a variety of grains, not just rice

Can the exposure to heavy metals (>) from foods be reduced?

Dietary variety is the best way to ensure a child gets adequate nutrition and can help minimize exposure to any one heavy metal.

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