Heavy Metals in Baby Foods and Fruit Juices

Advice for Families from Environmental Pediatricians

Reports of heavy metals in baby foods and fruit juices have been featured in news headlines across the United States, leaving families concerned about the health and safety of their children. This document includes useful information on heavy metals in food and drink products as well as strategies to reduce your family’s exposure.

Key Points

1. Many common baby foods and fruit juices contain small amounts of heavy metals such as lead and arsenic.
2. The low levels of metals found in food are likely a small part of a child’s overall exposure to metals; however, a child’s total metal exposure from all sources can pose a risk to health—particularly brain development.
3. The FDA should set strict enforceable guidelines to limit levels of heavy metals in baby food.
4. Parents can reduce heavy metals in their child’s diet with simple steps such as feeding them a variety of foods and limiting rice-based products and fruit juices.

What is a heavy metal?

- A heavy metal is a kind of chemical element—such as lead, mercury, cadmium, and arsenic.

Why are heavy metals found in some baby foods and fruit juices?

- Heavy metals can occur naturally in soil used to grow food, or can get into food through pesticides, industrial processing, and storage. This can lead to small amounts of heavy metals in some baby food products such as rice-based foods, vegetables (e.g., sweet potatoes), and fruit juices.

How can heavy metal exposure affect brain development in children?

- Brain development and IQ depend on many factors including genetics, nutrition, the child’s social environment, and environmental exposures. Heavy metal exposure is just one of these factors.
- Heavy metal exposure can interfere with learning, attention, and behavior. Infants and young children are especially vulnerable to the effects of heavy metals because their brains are rapidly developing.
- The levels of metals found in food are likely a small part of a child’s overall exposure to metals; however, a child’s total metal exposure from all sources can pose a risk to health.

My child has consumed some of the baby food products identified as containing metals. Should I have my child tested for heavy metals?

- We do not recommend heavy metal testing for children based on baby food consumption.
- Lead screening is part of routine well child care:
  - Children 6 months to 6 years of age should be evaluated for lead risk factors by a pediatrician.
  - Children in New York should be tested for lead exposure with a blood lead test at both their 1-year and 2-year old check-ups. Older children may need lead testing if risk factors are identified through screening. Lead testing requirements can differ among states.
  - Speak to your pediatrician if you are concerned that your child has been exposed to high levels of heavy metals through a non-baby food sources such as lead paint chips.
- The most important step is to reduce your child’s exposure to heavy metals from common sources.
What are simple steps to reduce a child’s exposure to heavy metals?

- **Lead:** The most common source of lead exposure is peeling paint in homes built before 1978. Other sources include some imported spices and cosmetics, water, and some hobbies/occupations. Learn more [here](#).

- **Mercury:** The most common source of mercury exposure is large predator fish. Since fish are an important part of a healthy diet, eat fish but choose wisely to limit mercury. For children age 1 and older, the FDA recommends 2 servings of fish per week from “Best Choices” list of low-mercury fish.

- **Arsenic:** To reduce arsenic in your child’s diet, limit consumption of rice-based foods. If you have well water, ask your local health department if arsenic testing is needed (arsenic can be present in the soil in some areas and can get into well water).

### Simple Steps to Reduce Heavy Metals from Common Baby Food Products

<table>
<thead>
<tr>
<th>Instead of…</th>
<th>Try these instead:</th>
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<tbody>
<tr>
<td>Rice snacks and puffs</td>
<td>Whole or pureed fresh fruits and vegetables, or rice-free snacks</td>
</tr>
<tr>
<td>Rice cereal</td>
<td>A variety of grains and cereals, such as whole grain, oats, multi-grain, barley</td>
</tr>
<tr>
<td>Rice-based teething biscuits or rusks</td>
<td>A damp washcloth that has been twisted and frozen (tie one end in a knot), massage sore areas with your clean finger</td>
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| Fruit juice                  | Children under 6 months: [breastmilk](#) or formula only  
Children 6 - 12 months: breastfeeding or formula, small amounts of tap water may be given as they learn to use a cup  
Children 12 months and older: tap water and milk |

**Cooking rice?** Brown rice has higher levels of arsenic compared to white rice. White basmati or sushi rice tends to have the lowest levels of arsenic. Learn more about [selecting rice from Consumer Reports](#). Rinse rice before cooking and cook in extra water (i.e., 1 cup of rice to 6 cups of water); drain extra water after cooking. Consider alternating rice with other grains that are lower in arsenic like grits, barley, farro, and bulgur.

**Overall, provide a diet rich in a variety of whole or pureed fruits and vegetables (wash thoroughly with cold water first), lean proteins, and a variety of grains.**

What is being done to reduce the presence of heavy metals in baby foods and fruit juices?

- The [Food and Drug Administration (FDA)](#) and food industry have taken steps to reduce heavy metals in baby food.

- [Healthy Babies Bright Futures](#) is a coalition of scientists, health professionals, and community-based organizations working together to support programs and policies that will reduce children’s exposure to toxins.

- An important next step is for the FDA to set health-based enforceable limits on heavy metals in baby foods and routinely monitor for compliance.

### Learn more about heavy metals in baby food:

- American Academy of Pediatrics (AAP): [Heavy metals in baby food](#)

- Consumer Reports: [What parents should know, and can do right now, to keep their kids safe](#)

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