

Heavy Metals in Baby Food and Fruit Juice: Advice for Parents from Environmental Pediatricians

The Bottom Line

1. Many common baby foods and fruit juices contain trace (very small) amounts of heavy metals such as arsenic and lead.
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.
3. Parents can reduce their child's exposure to heavy metals in their child's diet with simple steps such as reducing rice-based foods and fruit juices.
4. The FDA should set strict enforceable guidelines to limit levels of heavy metals in baby food.

What are heavy metals?

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

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

- 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 trace (very small) amounts of heavy metals (like lead, arsenic, mercury) in some baby food products and fruit juice.

How can heavy metal exposure affect brain development in children?

- Brain development and IQ depend on many factors, including genetics, nutrition, social environment, and environmental exposures. Heavy metal exposure is just one of these factors.
- Heavy metal exposure can interfere with learning, attention, and behavior in developing brains and has been linked to lower IQ.
- 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.

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. Children should be screened for lead at age 1 and 2. Learn more [here](#).
- **Mercury:** The most common source of mercury exposure is eating large predator fish. Since fish are an important part of a healthy diet, [eat fish but choose wisely](#) to limit mercury.
- **Arsenic:** To reduce arsenic in your child's diet, [reduce the amount of rice-based foods](#) (see next page). If you have well water, ask your [local health department](#) if arsenic testing is needed (arsenic is a natural soil contaminant in some areas and can get into well water).
- The **table on the next page** provides simple steps for reducing heavy metals in your child's diet.

What is being done about this issue of heavy metals in baby food and juice?

- The Food and Drug Administration (FDA) and food industry have taken steps, but more is needed.
- The FDA should set stronger limits for arsenic in rice cereal and apple juice, include more types of food under these standards, and enact a strict program to test for heavy metals in baby foods.
- All baby food companies should reduce heavy metals in foods as much as possible.

Simple Steps to Reduce Heavy Metals in Your Child's Diet

Instead of...	Try these instead
rice snacks and puffs	whole or pureed fruits and vegetables, or rice-free snacks
rice cereal	variety of grains and cereals, such as whole grain, oats, multi-grain or barley
rice-based teething biscuits or rusks	damp washcloth that has been twisted and frozen (tie one end in a knot), massage sore areas with your clean finger (more ideas from the American Academy of Pediatrics)
fruit juice	Children under 6 months: breastmilk or formula Children 6 – 12 months: breastmilk 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
<p>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 a little bit of extra water and drain the extra water after cooking. Consider alternating rice with other grains that are lower in arsenic like grits, barley, farro, and bulgur.</p>	
<p>Overall: Provide a diet rich in a <i>variety</i> of whole or pureed fruits and vegetables (wash thoroughly with cold water first), lean proteins, and a variety of grains.</p>	

Want to learn more?

Reduce sources of **lead** in your child's environment:

- Environmental Protection Agency (EPA) [information on dealing with lead in your home](#)
- American Academy of Pediatrics (AAP) [information on blood lead levels and screening](#)

Reduce **mercury** in your child's environment:

- Choosing [low mercury fish](#)
- Find your [local fish advisory](#) (for locally-caught fish)
- What to do if you have a [metallic mercury spill](#) (from a thermometer or other product)

Reduce **arsenic** in your child's environment:

- Centers for Disease Control and Prevention (CDC) [information on testing private wells for arsenic](#)
- Learn more about [sources of arsenic in the environment](#) including food, water, treated wood, and soil

More information about **heavy metals in baby food**:

- Healthy Babies Bright Futures: [2019 Report- What's in my Baby Food?](#)
- American Academy of Pediatrics (AAP): [Advice For Parents Concerned About Arsenic in Apple Juice](#)
- American Academy of Pediatrics (AAP): [Parent Plus: Limit infants' exposure to arsenic by feeding a variety of grains](#)
- Consumer Reports: [What parents should know, and can do right now, to keep their kids safe](#)

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