
Heavy Metals in Baby Foods and Fruit Juices

A Resource for Families

Summary of Key Points

- Some common baby foods and fruit juices contain small amounts of heavy metals such as lead and arsenic.
- 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.
- 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.

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 drinks as well as ways to reduce your family's exposure.

What is a heavy metal?

A heavy metal is a kind of metal found in the Earth's crust– such as lead, mercury, cadmium, and arsenic.

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

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

How can heavy metals affect brain development in children?

- Brain development and IQ depend on many factors, including genetics, nutrition, the child's social and economic environment, education, and chemicals in the environment. Heavy metal exposure is just one of these factors.
- Infants and young children are very sensitive to the effects of heavy metals because their brains are rapidly developing. Heavy metal exposure (from eating something with heavy metals in it) can affect a child's learning, attention, development, and behavior.
- The levels of metals found in food are likely a small part of a child's overall exposure to heavy metals; however, a child's total heavy metal exposure from all sources can pose a risk to health.

What are simple steps to reduce a child’s exposure to heavy metals?

- **Mercury:** The most common source of mercury exposure is eating large predator fish (like shark or swordfish).¹ Since fish are an important part of a healthy diet, eat fish but choose wisely to limit mercury.²
- **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).^{3,4}

Simple Steps to Reduce Heavy Metals in Your Child’s Diet	
Instead of:	Try these instead:
Rice snacks and puffs	Whole or pureed fresh fruits, vegetables, or rice-free snacks
Rice cereal	A variety of grains and cereals, such as whole grain, oats, multi-grain, and barley
Rice-based teething biscuits or rusks	A damp washcloth that has been twisted and frozen (tie one end in a knot). Massage sore areas with your clean finger. Explore more ideas from the American Academy of Pediatrics. ⁵
Fruit juice	Children under 6 months: breastmilk or formula only. Children 6 to 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: small amount tap water & 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. ⁶ 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.	
Children with special feeding or dietary needs: If your child is being prescribed rice cereal products for medical reasons (e.g., aspiration risk or reflux) please discuss with your doctor for other options if available.	
Overall, provide a diet rich in a variety of whole or pureed fruits and vegetables (wash thoroughly with cold water first), lean proteins, and variety of grains.	

What is being done to reduce heavy metals in baby foods & fruit juices?

- The Food and Drug Administration (FDA) and food industry have taken steps to reduce heavy metals in baby food. The Baby Food Council, a group of baby food companies and key stakeholders is exploring best practices to reduce levels of heavy metals.^{7,8}
- 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.⁹

My child has eaten some of the products that contain metals. Should I have my child tested for heavy metals?

- No, testing for heavy metals is not recommended for children based on baby food consumption. If you are worried about heavy metals in baby food, talk with your doctor.
- Because of possible lead hazards in the home, health care providers ask about lead during check-ups for young children:
 - Your health care provider will ask about lead risk factors during check-ups for children 6 months to 6 years of age (for example, age of home, condition of paint).
 - Children should be tested for lead exposure with a blood lead test at both their 1- and 2-year-old check-ups (older children may need lead testing if risk factors are identified through screening questions).¹⁰
 - Speak to your provider if you are concerned that your child has been exposed to high levels of lead through a non-baby food source such as worn-down lead paint.
- The most important step is to reduce exposure to heavy metals from common sources.

Learn more about heavy metals in baby food

- [American Academy of Pediatrics \(AAP\): Heavy metals in baby food](#)¹¹
- [Consumer Reports: What parents should know, and can do right now, to keep their kids safe](#)¹²

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