Get The Scoop on Lead in Baby Food & Prenatal Vitamins

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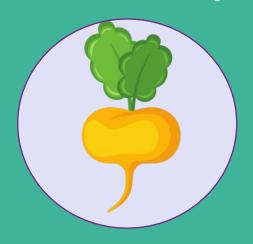
Unleaded Kids – www.unleadedkids.org





Let's Dish on Lead Contamination

For 1 to 6 year olds:





50% food



40% soil/dust

For 0 to 6 month olds:





50% soil/dust



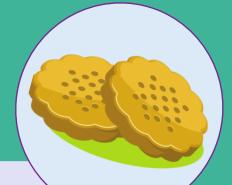
40% water

10% food



FDA's Action Levels for Baby Food

- FDA does not require testing nor disclosure for contaminants in food or dietary supplements
- Arsenic, cadmium, lead, and mercury have been in focus since 2017 and the impetus for the Closer to Zero initiative in 2021
- Sets action levels for top 5-10% of products on the market
- Action level guidance proposed in January 2025 for lead:
 - 20 ppb for dry infant cereals
 - 20 ppb for single-ingredient root vegetables
 - 10 ppb for other baby foods (with exceptions)
- European Union enforceable maximum levels of 20 ppb of lead in "baby food and processed cereal-based food for infants and young children"



EXEMPTIONS

- Snack foods, including grain-based or freezedried snacks such as arrowroot cookies, puffs, rusks, and teething biscuits
- Beverages, including toddler drinks
- Infant formula



What Are We Eating? Lead

- What is it?
 - A heavy metal

Pb Lead

- What is in?
 - Many foods,
 especially root
 vegetables (sweet
 potatoes,
 cassava, carrots,
 etc.)



What does it hurt?

- Kidneys
- Heart
- Lungs
- Brain
- Reproductive system



What Are The Rules?

Lead

U.S. FDA Regulations

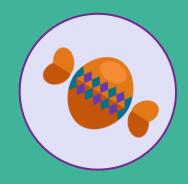
5 ppb in bottled water



U.S. FDA Guidance

- Action Levels for Lead in Processed Food Intended for Babies and Young Children (2025)
- Unavoidable Contaminants in Food for Human Consumption and Food Packaging Material— Ornamental and decorative ceramicware (2016)
- Lead in Candy Likely To Be Consumed Frequently by Small Children: Recommended Maximum Level and Enforcement Policy (2006)

The FDA issues guidance for industry to describe the agency's current thinking on a regulatory issue. ... Unlike regulations, guidance is not legally binding for the FDA or industry. —FDA





What Are We Eating? Arsenic

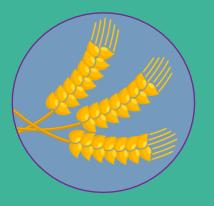
What is it?

 A light metalloid, organic & inorganic

33 **As**Arsenic

What is in?

• Rice (rice cereal)



What does it hurt?

- Brain
- Skin (cancer)





What Are The Rules? Arsenic

U.S. FDA/EPA

10 ppb in drinking & bottled water

U.S. FDA Guidance

- Action level for inorganic arsenic in apple juice (2023) — 11 ppb
- Action level for inorganic arsenic in rice cereals for infants (2020) — 100 ppb
- Action levels for inorganic arsenic foods Intended for Babies and Young Children anticipated by December 2025

"There is growing evidence from human and animal studies that exposure to inorganic arsenic during prenatal development could increase the risk of adverse health effects. These adverse effects include impaired development in utero and neurodevelopmental toxicity in infants and young children [ATSDR 2016]."—CDC



What Are We Eating? Cadmium

What is it?

 A heavy metal often found in phosphate fertilizer

48
Cd
Cadmium

What is in?

- Leafy greens (spinach)
- Grains (rice, wheat, oats)



What does it hurt?

- Kidneys
- Reproductive system





What Are The Rules? Cadmium

U.S. FDA/EPA Regulations

5 ppb in drinking water

U.S. FDA Guidance

 Action level for cadmium in foods intended for babies and young children anticipated in December 2025 "The potential adverse health effects from consuming foods contaminated with cadmium vary depending on the level of cadmium in the food; age of the consumer; length, amount, and frequency of exposure to cadmium in the food; and other exposures to different sources of cadmium and to beneficial nutrients." —FDA



What Are We Eating? Mercury

What is it?

A heavy metal



What is in?

- Fish
- Shellfish



What does it hurt?

- Brain
 - Neurological & psychological





What Are The Rules? Mercury

U.S. FDA/EPA Regulations

2 ppb in bottled water and drinking water

U.S. FDA Guidance

 Action Levels for Poisonous or Deleterious Substances in Human Food and Animal Feed (2000)

"Because mercury is widespread in the environment, and because it is not possible to remove mercury from seafood, or to grow or produce certain foods completely free of mercury, the FDA's goal is to limit consumer exposure to mercury, with a focus on protecting the very young, through developing regulations, setting action levels, and issuing advice to consumers." —FDA



What Does the Research Say? Lead in Youth

- FDA sets Interim Reference Level (IRL) so that the contribution from food is 10% of CDC's Blood Lead Reference Value
 - It is interim because FDA acknowledges there is no safe level of exposure to lead
- 2.6 million infants and young children exceed FDA's IRL of 2.2 mcg of lead per day (8 mcg/d for adults).



NOTE

Infants = 0-11 months, excluding those fed human milk

Young children = 1-6 years old



What Does the Research Say? Cadmium in Youth

- **12 million** children exceed FDA's toxicological reference value for cadmium (0.21 to 0.36 mcg of cadmium per kg of body weight per day).
 - Using the midpoint of the range for simplicity, for young children aged 1 to 6, their mean exposure was 51% greater than the TRV and the 90th percentile was 150% greater. Infants not fed human milk had lower dietary exposure, but the 90th percentile was still 37% higher than the TRV.



NOTE

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months, excluding
those fed human milk

Young children = 1-6 years old



Consumer Reports Investigations

Brian Ronholm

Director of Food Policy

Consumer Reports



Dark Chocolate - December 2022

- 28 dark chocolate bars
 - 5 products rated safer choice by Consumer Reports
 - Mast
 - Taza Chocolate
 - Ghirardelli (2)
 - Valrhona
 - 5 products high in both lead and cadmium
 - 10 products high in lead
 - 8 products high in cadmium





Cassava – May 2025

- Flagged by Lead-Safe Mama
- Gluten-free alternative
- Root vegetable also used to make tapioca
- 27 products evaluated for lead and cadmium by Consumer Reports
- 8 rated as better choices
- 12 rated as okay to eat occasionally
- 7 rates as products to avoid







"There is no excuse for having arsenic in baby food or formula. Absolutely none. The industry should be bending over backward to be certain it's not there."

DAVID CARPENTER, MD

Director of the Institute for Health and the Environment at the State University of New York at Albany

Infant Formula – March 2025

- 41 types of powdered formula
- Inorganic arsenic
 - Abbott Nutrition's EleCare Hypoallergenic at 19.7 ppb
 - Abbott Nutrition's Similac Alimentum at 15.1 ppb
- Lead ranged from 1.2 ppb to 4.2 ppb



Consumer Reports and Unleaded Kids Investigation into Baby Food Transparency







California AB-899 (Oct. 2023)

 Baby food = represented or purported to be specifically for babies and young children less than two years of age, excluding infant formula

 Applies to toxic elements: arsenic, cadmium, lead and mercury







California AB-899 (Jan. 2024)

- January 2024, manufacturers must:
 - Analyze a representative sample of each batch of their baby food products sold in California at least once a month at laboratory accredited for ISO/IEC 17025:2017, as good as FDA EAM 4.7 method, demonstrated proficiency to 6 ppb
 - Provide results to California
 Department of Health on request







California AB-899 (Jan. 2025)

- Manufacturers must:
 - Make results publicly available by posting results on website
 - Provide notice and QR codes on label after FDA finalizes action level





Transparency Ratings of 39 Baby Food Brands

- Evaluated 39 brand of baby foods with products broad portfolio of products or specialty
- Top score for 16 brands because consumer can easily find all test results for products on the brand's website.

Brainiac Foods

Cerebelly

Earth's Best

Fresh Bellies

Gerber

<u>Kendamil</u>

Lil' Gourmets

Mission MightyMe

Nestum/Cerelac

Nurture Life

Once Upon a Farm

Plum Organics

Pumpkin Tree

Square Baby

Stonyfield Organic

White Leaf Provisions

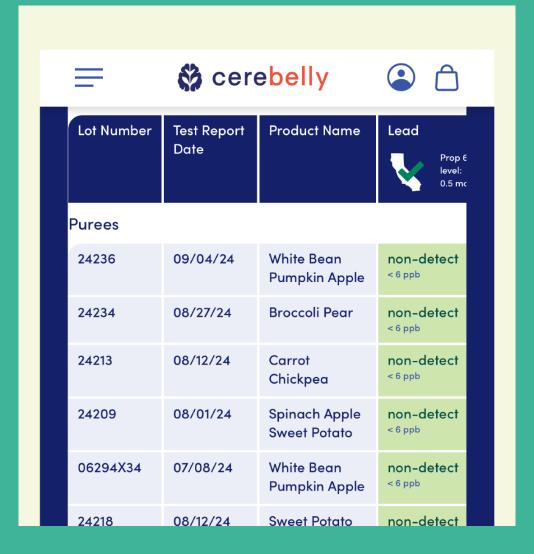








Example of a Top Scorer









Loco Bebe
Love Child Organics
Parent's Choice (Walmart)
Piko Provisions

Example of a Low Scorer

• Lowest score for 4 brands because no public webpage found to access test results.





Transparency Ratings, Part I

16 brands rated second lowest because consumer must locate and enter a lot code, best-by date, or batch number to access test results.

Amara

Babylife Organics

Baby Mum-Mum

Beech-Nut

Else Nutrition

Good & Gather Baby (Target)

Kekoa Foods

Little Bellies

Little Journey (Aldi)

<u>Little Spoon</u>

O Organics (Albertsons)

Puffworks

Ready Set Food

Sprout Organics

Yumi

Simple Truth (Kroger)







Ease of Use, Part I

An example of some of the barriers to access









Transparency Ratings, Part II

3 brands had information publicly available but with some barriers that kept them from top score.

- A consumer must locate and enter a 12-digit UPC number to access a product's test results.
- A consumer must click on best-by dates to find products and only then access test results.

<u>Holle</u>

Serenity Kids

Happy Baby Organics







Ease of Use, Part II

An example of slight barriers to access.







Next Up

- Scoring baby foods for better or worse than average levels of arsenic, cadmium, lead, and mercury
- Evaluating dietary supplements intended for babies







Lead & Cadmium in Prenatal Multivitamins



What Does the Research Say? Pregnancy Vitamins

- Over 80% of 156 liquid, liquid gel, powder, soft gel, tablet, capsule, caplet, chewable, and gummy prenatal vitamins on store shelves exceed 0.5 micrograms of lead per serving
 - Median concentration of lead: 79 ppb
 - Highest had 900 ppb of lead
- Nearly 75% of 156 had cadmium



NOTE

Study authors note that FDA sets a limit of 100 ppb of lead in candy.



California's SB 646 Bill – Passage soon?

- Introduced by Sen. Dr. Akilah Weber Pierson, an obstetrician/gynecologist
- Modeled on California AB 899 Testing and disclosure
- Unanimously passed Senate and its committees
- Unanimously passed two House committees
- Working through final details







Closing the Gap Ongoing Efforts

• Your communities have some coverage but gaps remain.

 Efforts make the difference (Seattle, New York City, Healthy Babies Bright Futures, Consumer Reports, Environmental Defense Fund)

• YOU have an important role in providing education about the research and consumer transparency laws.







Questions?

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Unleaded Kids Blog – www.unleadedkids.org/blogs



