

# Toxic Metals in Baby Food

The congressional findings and  
what they mean for food companies

PRESCOUTER



# A recent congressional subcommittee report shed light on the problem of baby food products being contaminated with toxic heavy metals such as arsenic, lead, cadmium, and mercury.

These products are manufactured by some of the largest baby food brands in the United States. These brands are produced by Nurture, Beech Nut Nutrition Company, Hain Celestial Group, Gerber, Campbell Soup Company, Walmart, and Sprout Foods.

## The subcommittee reported their grave concerns and provided the following recommendations:

- Companies should be required by the FDA to perform mandatory testing of finished products.
- FDA should require manufacturers to put labels reporting the levels of toxic heavy metals.
- Manufacturers should voluntarily start phasing out toxic ingredients.
- FDA should set strict standards for maximum levels of toxic heavy metals allowed in baby food.
- Parents should be vigilant about baby food products containing these toxic heavy metals.



## The subcommittee also highlighted a secret presentation that indicated how one company was aware of these toxic levels of heavy metals in their products.

According to a secret presentation received by the FDA on August 1st of 2019 from Hain, corporate policies allow for testing of individual ingredients with internal standards that are higher than the recognized safe levels.

Additionally, there is no testing carried out on the final product. As a result, the final product in this case ends up exceeding the recommended standard of toxic heavy metals by several fold.

[1] <https://oversight.house.gov/sites/democrats.oversight.house.gov/files/2.pdf>



A secret slide presentation from Hain<sup>1</sup>, the maker of Earth's Best Organic baby food, revealed that finished baby food products contain even higher levels of toxic heavy metals than estimates based on individual ingredient test results.

**One heavy metal in particular, inorganic arsenic, was repeatedly found to be present at **28-93% higher levels** than estimated.**

## Based on its findings, the subcommittee raised a number of recommendations, highlighting the need for:

- **Mandatory testing** – Baby food manufacturers should be required by FDA to test their finished products for toxic heavy metals, not just their ingredients;
- **Labeling** – Manufacturers should be required by the FDA to report levels of toxic heavy metals on food labels;
- **Voluntary phase-out of toxic ingredients** – Manufacturers should voluntarily find substitutes for ingredients that are high in toxic heavy metals, or phase out products that have high amounts of ingredients that frequently test high in toxic heavy metals, **such as rice**;
- **FDA standards** – FDA should set maximum levels of toxic heavy metals permitted in baby foods. One level for each metal should apply across all baby foods. And the level should be set to protect babies against the neurological effects of toxic heavy metals; and
- **Parental vigilance** – Parents should avoid baby foods that contain ingredients testing high in toxic heavy metals, such as rice products. Instituting recommendations one through four will give parents the information they need to make informed decisions to protect their babies.

# So, what are the current legislation surrounding the testing, disclosure, and labeling requirements for toxic metals in baby food in the United States?

The FDA identifies heavy metals as a chemical hazard and requires companies to conduct internal testing and hazard analysis. It also requires companies to have developed a “food safety plan” that includes hazard analysis and preventive measures used by the company to ensure food safety. These regulations **apply to all food manufacturing facilities including baby food manufacturing companies.**

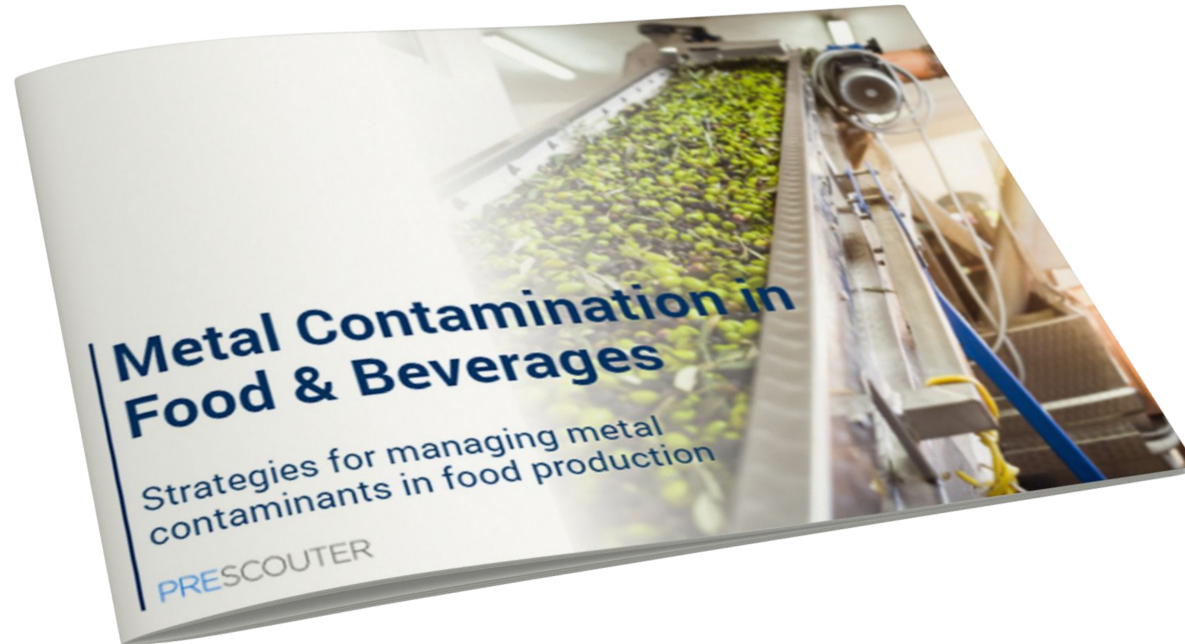
On August 20, 2020 the FDA issued guidance finalizing the 2016 draft guidance **for inorganic arsenic** in infant rice cereals and identifying the agency’s intended sampling and enforcement approach. However, the set limits have been **criticized by experts as still being too high.**

Specific regulations on other heavy metals in baby foods are not declared.

The FDA has also established a “**Toxic Elements Working Group (TEWG)**”. The group works on (a) prioritizing metals by toxicity and prevalence, (b) identifying most vulnerable populations, and (c) determining effective ways to reduce exposure. However, the subcommittee notes that this group “**has not resulted in new or stronger regulations to protect babies from toxic heavy metals in their food.**”

For comparison, **the EU sets strict standards** for toxic heavy metal contamination in baby foods and has specific limits for such food items. It sets the limit of lead to 0.02 mg/kg and arsenic to 0.1 mg/kg. Cadmium levels can range between 0.005 to 0.2 mg/kg depending on the baby food item such as infant formula or cereal-based foods. **These limits can provide a reference for US agencies to formulate and enforce regulations to ensure safety.**

**Emerging technologies are helping food companies detect and reduce metal contamination throughout all of the stages of food processing. Learn more about these strategies in [this report](#).**



## Next Steps

- PreScouter can help conduct a thorough and comprehensive review of your entire supply chain testing and methodologies.
- PreScouter can review minor ingredients' potential impact to Food Safety Plan Hazard Analysis and Quality Assurance.
- PreScouter can find alternative sources of brown rice and other key ingredients.

### SOME POSSIBILITIES THAT PRESCOUTER CAN OFFER FOR CONTINUATION OF OUR RELATIONSHIP

 **COMPETITIVE INTELLIGENCE**

 **TECHNOLOGY ROADMAPING**

 **TECHNOLOGY & PATENT LANDSCAPING**

 **MARKET RESEARCH & ANALYSIS**

 **TRENDS MAPPING**

 **REVIEW BEST PRACTICES**

 **PATENT COMMERCIALIZATION STRATEGY**

 **DATA ANALYSIS & RECOMMENDATIONS**

 **ACQUIRE NON-PUBLIC INFORMATION**

 **SUPPLIER OUTREACH & ANALYSIS**

 **CONSULT WITH INDUSTRY SUBJECT MATTER EXPERTS**

 **INTERVIEWING COMPANIES & EXPERTS**

# About the Authors



**Gareth Armanious**

Technical Director

Gareth Armanious is one of PreScouter's Project Architects. He specializes in the Food & Beverage and Life Sciences industries. As an academic, he specialized in membrane protein biochemistry, working with an international research group assembled to study structural and functional aspects of these challenging targets in health and disease. Gareth graduated with a BSc in biochemistry, medical specialization, from the University of British Columbia, and is completing his PhD in Biochemistry at the University of Alberta.



**Tanmay Chavan**

Researcher

Tanmay received his PhD in Medicinal Chemistry from the University of Illinois and completed his postdoctoral training at Stanford University. He is currently a scientist working in the domain of drug discovery. He also works as a freelance science writer and consultant. He is deeply interested in learning about upcoming technologies that can impact our daily lives.



# About PreScouter

## PRESCOUTER PROVIDES CUSTOMIZED RESEARCH AND ANALYSIS

PreScouter helps clients gain competitive advantage by providing customized global research. We act as an extension to your in-house research and business data teams in order to provide you with a holistic view of trends, technologies, and markets.

Our model leverages a network of 3,000+ advanced degree researchers at tier 1 institutions across the globe to tap into information from small businesses, national labs, markets, universities, patents, startups, and entrepreneurs.

### CLIENTS RELY ON US FOR:



**Innovation Discovery:** PreScouter provides clients with a constant flow of high-value opportunities and ideas by keeping you up to date on new and emerging technologies and businesses.



**Privileged Information:** PreScouter interviews innovators to uncover emerging trends and non-public information.



**Customized Insights:** PreScouter finds and makes sense of technology and market information in order to help you make informed decisions.

**500+** CLIENTS WORLDWIDE

**4,000+** RESEARCH REPORTS CREATED

**150,000+** HOURS OF RESEARCH COMPLETED FOR CLIENTS