Sara Forsido saraforsido@gmail.com February 5, 2024 **RE: Support HB009**

To whom it may concern,

As an environmental health student, I find it my duty to express my strong support for HB0097 and push for the prioritization of the safety and health of children in Maryland. With this bill, the requirement of baby food manufacturers to provide labels and test for toxic heavy metals in Maryland will be a historic step towards protecting the health and development of millions of children, who are the future of our world.

Infants and young children are an incredibly vulnerable population. They are at higher risk of harm from heavy metals because their biological systems are still developing. The major route of toxic heavy metal exposure for all, including infants, is through the ingestion of contaminated food. Consumption of heavy metals over time causes bioaccumulation in the body. Children and infants have a high food intake to body weight ratio. This means that they experience excessive bioaccumulation of toxic heavy metals in their bodies through ingestion of contaminated foods and the resulting impact on their bodies is strongly adverse. Ultimately, heavy metal exposure through baby food contributes to a variety of health issues.

Toxic heavy metals interact and interfere with the biological systems most severely in children, contributing to a wide range of health issues. Heavy metal exposure through baby food causes delays during the important developmental stages of infants' and children's lives, including learning, attention, cognition, and behavioral issues.

According to several studies, arsenic, cadmium, lead, and mercury are the major toxic heavy metals commonly found in most baby foods. We need to take major action to protect children in Maryland from the effects of these heavy metals and supporting HB0097 is the way to do so. Arsenic and cadmium are both known to be carcinogenic and regular ingestion of contaminated baby food may contribute to the development of cancer in infants and children. In addition, arsenic also contributes to the onset of cardiovascular disease, pulmonary disease, diabetes, and developmental effects, which are significantly harmful during the early stages of

child development. Similarly, cadmium also has toxic effects on the renal, skeletal, and respiratory systems of children.

Lead is incredibly detrimental to children's health and its toxicity is known to cause damage to the brain and nervous system, as well as have toxic effects on the renal, cardiovascular, immune, skeletal, and reproductive systems. This nervous system and brain damage leads to the onset of neurological disorders and behavioral problems and increases the possibility of several diseases, including Alzheimer's disease, Parkinson's disease, and schizophrenia. Lead also inhibits heme biosynthesis, which can cause problems with the blood, such as anemia. There is no safe level of lead exposure. Mercury also causes adverse health effects on development and is neurotoxic, nephrotoxic, and immunotoxic. It also contributes negatively affects cardiovascular and endothelial function, even in low doses. There is no safe level of mercury exposure either.

It is so important for manufacturers to test and label their baby food and formula to stop more harm from being done to children in Maryland by toxic heavy metals. The promotion of HB0097 is critical for protecting the health and peace of infants and families from something they do not have control over. The implementation of these preventative actions would be an effective method to protect public health and provide consumers with more information about what they are purchasing for their children.

I thank you for your consideration of this issue and strongly urge that this legislation be passed, which would be a great victory for the millions of children and families of Maryland.

Sincerely,

Sara Forsido

Sources

- Bair, E. C. (2022). A Narrative Review of Toxic Heavy Metal Content of Infant and Toddler Foods and Evaluation of United States Policy. *Frontiers in Nutrition*, 9, 919913. https://doi.org/10.3389/fnut.2022.919913
- Bose-O'Reilly, S., McCarty, K. M., Steckling, N., & Lettmeier, B. (2010). Mercury Exposure and Children's Health. *Current Problems in Pediatric and Adolescent Health Care*, 40(8), 186–215. https://doi.org/10.1016/j.cppeds.2010.07.002
- Centers for Disease Control and Prevention. (2022, September 2). *Health Effects of Lead Exposure* | *Lead* | *CDC*. Www.cdc.gov. https://www.cdc.gov/nceh/lead/prevention/health-effects.htm
- MD, C. M. (2021, March 5). Heavy metals in baby food? What parents should know and do. Harvard Health. https://www.health.harvard.edu/blog/heavy-metals-in-baby-food-what-parents-should-kn ow-and-do-2021030522088#:~:text
- Metals in Baby Food. (2020). HealthyChildren.org. https://www.healthychildren.org/English/ages-stages/baby/feeding-nutrition/Pages/Metals -in-Baby-Food.aspx
- Sanders, T., Liu, Y., Buchner, V., & Tchounwou, P. B. (2009). Neurotoxic effects and biomarkers of lead exposure: a review. *Reviews on Environmental Health*, 24(1), 15–45. https://doi.org/10.1515/reveh.2009.24.1.15
- WHO. (2019, May 1). Exposure to cadmium: a Major Public Health Concern. Www.who.int. https://www.who.int/publications/i/item/WHO-CED-PHE-EPE-19-4-3
- World Health Organization. (2022, December 7). *Arsenic*. World Health Organization; World Health Organization: WHO. https://www.who.int/news-room/fact-sheets/detail/arsenic