Potentially hazardous nanoparticles found in powdered baby formula

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Select Gerber (NESN VX), Enfamil (MJN), Similac (ABT), and Well Beginnings (WBA) products tested

OAKLAND, CALIF. — Nanoparticles linked to potential health hazards were found in popular powdered baby formula products, according to a first-of-its-kind report released today. Scientists found unlabeled and under regulated nanotechnologies in six out of six formulas tested, including Gerber, Enfamil, Similac and Well Beginnings products currently on store shelves.

Friends of the Earth’s report, “Nanoparticles in Baby Formula: Tiny new ingredients are a big concern,” details new findings from independent lab research and compiles data from health impact studies on nanoparticles. Nano-sized structures and particles of potential concern were found in all six of the baby formulas tested, including: nano-hydroxyapatite (nano HA) in needle-like and non needle-like form, nano titanium dioxide (TiO2), and nano silicon dioxide (SiO2) (the nano TiO2 and SiO2 results demonstrated possible presence).

“This technology is moving from the lab to the marketplace without sufficient regulation, safety assessment and labeling,” said lead report author, Ian Illuminato, health and environment campaigner with Friends of the Earth. “It’s of real concern that these tiny particles are used in hundreds of consumer products, and now in infant formula, with minimal to no oversight. Companies and regulators must take extra care with a product fed to the most vulnerable among us.”

“Few health impacts studies have been done upon nanoparticles. Yet we have concerns about potential health impacts,” commented Tracey Woodruff, PhD, MPH, with the Philip R. Lee Institute for Health Policy Studies at the University of California, San Francisco. “Some nanoparticles are ‘needle-like’ in structure. This is concerning. We don’t know if they can possibly penetrate cell walls and migrate to other parts of the body, or cause harm when inhaled. The problem is, there hasn’t been enough research to suggest that using the types of nanoparticles found in  this infant formula study  is absolutely safe.”

Mark Mitchell, MD, MPH, chair of the National Medical Association’s Commission on Environmental Health agreed. “We know that our federal and state chemical regulatory systems are broken and have failed to protect our patients from illness resulting from product ingredients introduced into the marketplace before adequate health studies have been conducted. Babies’ bodies are developing and can be especially vulnerable to exposures from hazardous materials. As a physician working with low income communities and communities of color, I am concerned that this new information on powdered baby formula may indicate disproportionate impacts on vulnerable populations.”

“The failure of FDA to protect infants and mothers from the presence of potentially harmful nanoparticles in baby formula is mystifying,” said Lynn Kersey, executive director of Maternal and Child Health Access. “I know that not all powdered baby formula was tested, but the presence of these nanoparticles in these specific products is concerning to those of us working with low income families who may be more likely to use powdered formula. This means potentially disproportionate impacts on low income people and families of color.”

Lisa Archer, director of the Food & Technology Program at Friends of the Earth and herself a mother, wants federal agencies to protect the public: “Like many parents and caregivers, I had to feed my child formula. I am outraged that these poorly studied, virtually unregulated and unlabeled nanomaterials are present in infant formula when there are suitable non-nano ingredients that have been used for decades and don’t carry the same risks. The FDA must act immediately to put a moratorium on the use of nanomaterials in formula and other food until they can be proven safe, and are regulated and labeled. In the meantime, formula companies must immediately commit to not use these materials.”

Gerber is owned by Nestle, Enfamil is own by Mead Johnson, Similac is owned by Abbot Laboratories, and Well Beginnings is owned by Walgreens.

Friends of the Earth and eight other groups have sent letters to the FDA urging immediate removal of formulas with nanomaterials and for a moratorium on the use of these materials in formula until safety assessment, oversight and labeling are established. They also sent a letter to OSHA advocating for better protection of workers who may be exposed to nanomaterials. A letter was also sent to formula companies demanding that they stop using nanomaterials in absence of safety assessment, regulation and labeling. Advocates are urging consumers to sign a petition demanding this action from companies.