Subject: More pesticide testing on children’s favorite fruits and vegetables

Dear Secretary Vilsack, Administrator Jackson, and Commissioner Hamburg:

We are writing to urge you to release the latest data on pesticide residues on fruits and vegetables frequently eaten by babies and children. These data, which the government normally releases by January each year, are overdue.

A growing body of scientific evidence shows that pesticide consumption can cause lasting harm to children's brain development. Three recently published studies have all shown that early life exposure of children to pesticides can cause persistent problems in learning, memory and behavior. One of these studies, led by Brenda Eskenazi of the University of California, Berkeley, found that children born to mothers with the most intense exposures to pesticides demonstrate IQ deficits of up to seven points.

Children are uniquely sensitive to harmful effects from pesticides. Yet they eat substantial quantities of certain fresh fruits and vegetables – apples, berries, peaches, for example – proven to contain multiple pesticide residues. We urge you to expand testing programs and share ample information with the public about pesticides in all produce, especially those that show up in children’s diets.

Eating plenty of fresh fruits and vegetables is an essential part of a healthy, balanced diet for children. Information on pesticide residues on produce is of vital importance to parents who want to make informed choices about the foods they serve their children. It is the backbone of agency assessments, required under federal pesticide law, of people’s exposures to pesticides and the resulting health risks. And it is key to monitoring progress in reducing the public’s intake of pesticides.

Scientific evidence on pesticides’ lasting harm to children. Three epidemiological studies published April 21 in Environmental Health Perspectives show a clear link between a mother’s exposure to organophosphate (OP) insecticides during pregnancy and deficits to children’s learning and memory that persist through the ages of 6 to 9.

- Columbia University researchers linked deficits in IQ and working memory among seven-year-olds born in New York City to prenatal exposure to the pesticide chlorpyrifos, an organophosphate (OP) popular for residential pest control until that use was banned in
2001 by the U.S. Environmental Protection Agency (Rauh 2011). Children continue to be exposed to OP pesticides that contaminate common foods (Lu 2008).

- Researchers from the Mt. Sinai Medical Center linked prenatal organophosphate exposures among New York City-born children to impaired perceptual reasoning, a measure of nonverbal problem-solving skills (Engel 2011).
- Scientists at the University of California, Berkeley, found that children born in a Latino farmworker community to women with high organophosphate exposures had children with lower intelligence scores at age 7, relative to children born to women with lower pesticide exposures (Bouchard 2011). IQ deficits equaled those measured in children suffering from lead poisoning, according to the U.S. Centers for Disease Control and Prevention (Canfield 2003).

These three studies focused on populations at high risk for organophosphate exposure. Other research indicates that less intense exposure to these chemicals also threatens the health of children.

In 2009, in an award-winning study published by the journal *Environmental Science & Technology*, Devon Payne-Sturges of EPA’s National Center for Environmental Research analyzed CDC biomonitoring data for organophosphate insecticide exposure in American children (Payne-Sturges 2009). She concluded that two in five American children are exposed to enough organophosphate pesticides to exceed safe amounts. In May 2010, a team led by Maryse F. Bouchard of the Harvard School of Public Health analyzed the same biomonitoring data and found that the children with elevated organophosphate exposure were more likely to be diagnosed with attention deficit-hyperactive disorder (Bouchard 2010).

**Government testing programs must be bolstered to protect children.** EPA has established some restrictions on uses of organophosphate pesticides to kill insects in the home and on domestically grown food crops. The agency concluded that these changes would provide a “reasonable certainty of no harm” for cumulative exposures for children and other vulnerable populations, as required by law (EPA 2006). Federal pesticide monitoring programs by U.S. Department of Agriculture and federal Food and Drug Association are necessary to help assure that these restrictions are sufficient.

Yet research indicates that USDA and FDA produce monitoring does not give an accurate picture of children’s diets, which may vary from season to season. When children eat more fresh, seasonal produce, their pesticide exposure may spike.

A peer-reviewed study by public health researchers from Harvard and Emory Universities and the FDA, published in *Environmental Health Perspectives* last November, is one of a number of recent reports documenting gaps in current testing programs. The team detected 14 different pesticides in the daily diets of 46 children in Georgia and Washington State. About one-fifth of the food prepared by the children’s parents contained at least one pesticide, among them organophosphate and carbamate insecticides that are carcinogens, neurotoxins and developmental toxins (Lu 2010).

Despite growing evidence that children are at risk from agricultural chemicals, produce industry lobbyists are seeking to restrict the public’s right to know about pesticides in fruits and vegetables.
**Industry pressure attempts to thwart public access to pesticide data.** Last month, according to press reports, 18 trade groups representing conventional producer growers urged USDA Secretary Thomas Vilsack to revise the department’s annual release of pesticide residue monitoring data. This effort seemed aimed at thwarting public education efforts like the Environmental Working Group’s Shopper’s Guide to pesticides in produce.

We understand that this was not the first time the agency has faced pressure from the produce industry to restrict public access to pesticide data.

On October 19, executives from the United Fresh Produce Association met with Larry Elworth, chief agricultural counselor to the EPA administrator; Steven Bradbury, deputy director of the Office of Pesticide Programs for EPA; Don Kraemer, deputy director for the FDA Office of Food Safety; and Sarah Bittleman, senior advisor to the Agriculture secretary.

Afterwards, Ray Gilmer of United Fresh Produce told *The Produce News* that the federal officials had promised to “look into” how the administration “packages the release of annual pesticide data” produced by USDA’s Pesticide Data Program. Another account of the meeting said that all three agencies agreed that pesticide data was being misinterpreted (Murphy 2010).

According to *The Packer* (Karst 2010) and *The Produce News*, the October meeting targeted efforts, including those by Environmental Working Group, to advise consumers about ways to reduce exposures to pesticides on fruits and vegetables.

As medical professionals, scientists and public health advocates who have long urged consumers to reduce pesticide exposures when possible, we are concerned about any industry efforts to spin or censor the government’s collection and release of pesticide residue data.

**Recommendations.** Your agencies should make it easier for consumers to obtain information essential to making informed choices about the foods they buy and serve their families.

To that end, we urge you to:

- Speed the release of the latest data on pesticide residues in produce.
- Bolster the FDA’s Total Diet Study and USDA’s Pesticide Data Program to make them even more informative and transparent.

These programs should be expanded to give Americans a full accounting of risks faced by children who consume pesticides on produce. We recommend that the federal government:

- Test annually all fresh produce commonly eaten by children, especially those likely to carry significant pesticide residues. The Lu study team found that the USDA's PDP testing program covered only one-third of the foods eaten by the 46 children in the study and that 5 percent of 239 samples tested were tainted with pesticides at levels higher than any measured in USDA's PDP program (Lu 2010).
• Conduct more extensive CDC and EPA dietary studies to assess varying risks to children who eat seasonal and local produce. Children in the Lu study consumed more seasonal food commodities -- apples, peaches, nectarines, melon, grapes, pears, and strawberries -- than predicted by federal dietary studies. The researchers also found that insecticide residues varied by state (Lu 2010).

• Expand monitoring of pesticide residues for imported foods. A 2003 survey found that 71 percent of the pesticides commonly used by Costa Rican farmers would not be detected by FDA’s imported food monitoring program, in some cases because those pesticides were barred for U.S. use (Galt 2009).

• Tighten regulations governing pesticide residues on food crops to ensure “reasonable certainty of no harm” for children and other people most sensitive to pesticide effects. These regulations should consider how exposures to multiple pesticides may have additive effects that cause harm through a common mechanism.

• Enhance efforts to promote organic fruits and vegetables as options for consumers concerned about pesticide exposure, especially for children.

The rapid growth of the organic food industry shows that an increasing number of Americans are seeking to avoid consuming pesticide residues. We strongly urge your agencies to work together and improve the government’s pesticide testing so Americans can reduce their exposure to chemicals, even as they consume fruits and vegetables essential to a healthy diet.

Sincerely,

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References


