



GOLISANO
CHILDREN'S HOSPITAL

Pesticides in Food

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MEDICINE of THE HIGHEST ORDER

Pesticides Overview

- **Pesticides include: herbicides, insecticides, rodenticides, bactericides, fungicides, insect repellent, animal repellent, antimicrobials, disinfectant (antimicrobial), and sanitizer.**
- **By the 15th century, toxic chemicals such as arsenic, mercury, and lead were being applied to crops to kill pests.**
- **Lead Arsenate finally banned as insecticide in 1988**
- **DDT developed in 1947**
- **many more since mid 1900s**

Effect of Pesticides on Health

Acute exposure

- **Dizziness/Weakness**
- **Muscle twitching**
- **Difficulty breathing**
- **Skin rashes**
- **Eye burning**
- **Change in overall level of alertness**

Effect of Pesticides on Health

Effect can be delayed, increasing risk of:

- **Cancer**
- **neurological problems**
- **Fertility problems**
- **birth defects**
- **fetal death**
- **neurodevelopmental disorder**

Prevention

- **Most important to eat a wide variety of produce whether conventional or organic. Local is also good**
- **Wash and scrub with water to reduce pesticide residue**
- **Buy organic fruits and vegetables when possible**
- **Learn which to always buy organic, and which are safe to buy non-organic**

Recommended reading/websites

Environmental Working Group

Shoppers Guide to Pesticides in Produce - <https://www.ewg.org/foodnews/>



Recommended reading/websites

Consumer Reports

Risk Guide for Conventional Produce –

<https://www.consumerreports.org/cro/health/natural-health/pesticides>

Rules to Shop By

Our risk guide for conventional produce

This chart shows the risk of pesticide exposure from eating 48 fresh conventional fruits and vegetables from 14 different countries. Analyzing 12 years of data from the Department of Agriculture's Pesticide Data Program, Consumer Reports scientists, in consultation with Charles Benbrook, Ph.D., of Washington State University, placed each produce-country combination into one of five risk categories. Risk assessment included the number of pesticide residues on each food, the frequency with which they were found, and the toxicity of the pesticides.

The risk categories correlate with the number of daily servings of that fruit or vegetable. (See the key at the bottom.)

We also took into account the typical serving size of the food and the weight of the person eating that food. Our analysis is based on the risk to a 3½-year-old child, estimated to weigh 35.2 pounds, because children are especially vulnerable to the dietary risks from pesticides and the EPA is required to consider the effects of pesticides on children. The risks to adults would be lower.

We recommend buying organic for any produce-country combination in the medium or higher risk categories. We found that all organic produce falls into the low- or very low-risk categories. Conventional items in the low or very low categories are essentially equivalent to organic.



https://www.consumerreports.org/content/dam/cro/news_articles/health/PDFs/CRO_Health_Pesticide_Chart_03-15.pdf

Recommended reading/websites



healthychildren.org

Powered by pediatricians. Trusted by parents.
from the American Academy of Pediatrics

HealthyChildren.org - parenting website run by American Academy of Pediatrics

Protecting Children from Pesticides: Information for Parents

<https://www.healthychildren.org/English/safety-prevention/all-around/Pages/Protecting-Children-from-Pesticides-Information-for-Parents.aspx>

Recommended reading/websites

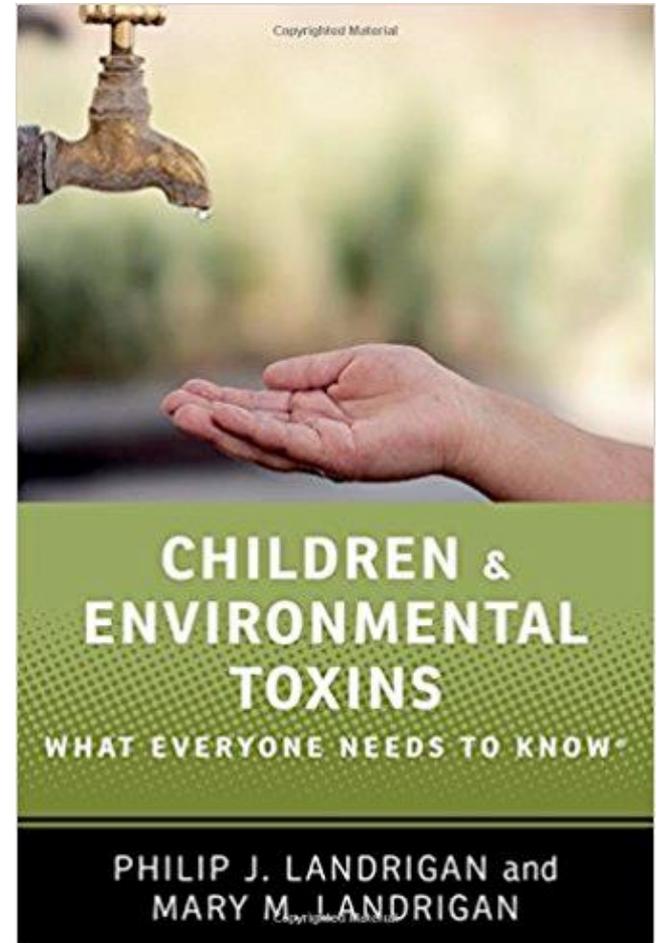
Children and Environmental Toxins: What Everyone Needs to Know

book by

Philip J. Landrigan, MD, M.Sc., is Professor of Pediatrics and Founding Director, Children's Environmental Health Center at Mount Sinai Hospital.

Mary M. Landrigan, M.P.A., is a health educator who spent 25 years at the Westchester County Department of Health.

<https://www.amazon.com/Children-Environmental-Toxins-Everyone-Needs-ebook/dp/B07877Q44D>



Thank you!

**Finger Lakes
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