

Science News

[Share](#)
[Blog](#)
[Cite](#)

[Print](#)
[Email](#)
[Bookmark](#)

Organic Diets Lower Children's Exposure To Two Common Pesticides

ScienceDaily (Feb. 21, 2006) — Organic diets lower children's dietary exposure to two common pesticides used in U.S. agricultural production, according to a study by Emory University researcher Chensheng "Alex" Lu, PhD. The substitution of organic food items for children's normal diets substantially decreased the pesticide concentration to non-detectable levels.

See also:

Health & Medicine

- [Diet and Weight Loss](#)
- [Nutrition](#)
- [Children's Health](#)

Plants & Animals

- [Organic](#)
- [Agriculture and Food](#)
- [Food](#)

Reference

- [Organic farming methods](#)
- [Pesticide](#)
- [Organic food](#)
- [Pesticide poisoning](#)

"The use of organophosphorus pesticides in residential areas has either been banned or restricted by recent regulatory changes," Dr. Lu continues. "This helps to minimize children's exposure, but still few restrictions have been imposed in agriculture."

In his initial research, Dr. Lu and his colleagues from Emory University, the University of Washington, and the Centers for Disease Control and Prevention (CDC) specifically measured the exposure of two organophosphorus pesticides (OP) - malathion and chlorpyrifos - in 23 elementary students in the Seattle area by testing their urine over a 15-day period.

The participants, ages 3 to 11-years-old, were first monitored for three days on their conventional diets before the researchers substituted most of the children's conventional diets with organic food items for five consecutive days. The children were then re-introduced to their normal foods and monitored for an additional seven days.

According to Dr. Lu, there was a "dramatic and immediate protective effect" against the pesticides until the conventional diets were re-introduced. While consuming organic diets, most of the children's urine samples contained zero concentration for the malathion metabolite. However, once the children returned to their conventional diets, the average malathion metabolite concentration increased to 1.6 parts per billion with a concentration range from 5 to 263 parts per billion, Dr. Lu explains.

A similar trend was observed for chlorpyrifos. as the average chlorpyrifos metabolite concentration increased from one part per billion during the organic diet days to six parts per billion when children consumed conventional food. The study was funded by the United States Environmental Protection Agency.

Adapted from materials provided by Emory University Health Sciences Center, via EurekaAlert!, a service of AAAS.

Ads by Google

Advertise here

How to Lose Stomach Fat

Finally, a Diet That Really Works! As Seen on CNN, NBC, & CBS News.
www.Wu-YiSource.com

"How To Lose Belly Fat"

New Secret Melts Stomach Flab. As Seen On CNN.
www.FireYourFat.com

Organic Farming

Why We Support Organic Farming. The Latest Gardening Advice!
LifeScript.com

How I Beat Cholesterol

Free Report: The 23 Cent Life-Saver Heart Surgeons Never Tell You About
HealthResources.net

1 Trick to Lose Belly Fat

I'd given up, humiliated by my fat belly, until I found this 1 secret.
www.TruthAboutAbs.com

Related Stories

Study Finds Children Are Exposed To Pesticides

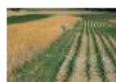
(Apr. 25, 2000) — A University of Washington study suggests that pesticides are finding their way into the bodies of pre-school children in agricultural communities at a higher level than previously ... [> read more](#)

Several Commonly Used Pesticides Are Toxic To Mitochondria In Laboratory Experiments

(Nov. 10, 2003) — Scientists at Emory University School of Medicine have found in laboratory experiments that several commonly used pesticides are just as toxic or even more toxic to the mitochondria of cells than the ... [> read more](#)

Study Concludes That Pesticide Use Increases Risk Of Parkinson's In Men

(June 15, 2006) — Mayo Clinic researchers have found that using pesticides for farming or other purposes increases the risk of developing Parkinson's disease for ... [> read more](#)



Organic Farming Beats No-Till?

(July 24, 2007) — Organic farming can build up soil organic matter better than conventional no-till farming can, according to a long-term study. Organic farming, despite its emphasis on building organic matter, was ... [> read more](#)

Organic Diet Makes Rats Healthier

(Mar. 29, 2005) — A team of European scientists, including one from Newcastle University, has found in an experiment that rats that ate organic food were much healthier than those that ate conventional ... [> read more](#)

Just In:

700-year-old Mexican Mummy With Tummy Ache

Science Video News



The Taste Gene

In the first study to link taste genes to behavior in children, researchers looked at how natural variations in a recently discovered taste gene. ...

[> full story](#)

- ▶ [Human Factors Researchers Develop Device To Measure Asthma Triggers](#)
- ▶ [A Vacuum Alternative to Pesticides for Microbiology Solution](#)
- ▶ [Entomologists Design Environmentally-Friendly Lawns, Golf Courses](#)
- ▶ [more science videos](#)

Teeth Whitening Strips Exposed!

For someone wanting to enhance their appearance, a good teeth whitener is a must! We often underestimate the importance of having a brighter smile. Aside from your eyes, which **first impression** characteristic do people usually remember **about you**? Think about it! A whiter, brighter smile equals youth and friendliness! If you're reading this, I'm sure you feel the same way.

[▶ Click here for 3 Tips for Whiter Teeth!](#)

www.Best-Teeth-Whitening.com

Ads by Google

Breaking News

... from NewsDaily.com

▶ "Lucky" the Koala lives after horror car hit



Ads by Google

▶ Tropical Storm Bertha gets second wind over Bermuda

▶ Experts detail how rice absorbs so much arsenic

▶ Tasmanian Devil mating earlier to beat extinction

▶ Drug prevents bone loss in prostate cancer: Amgen

▶ [more science news](#)

Lindane and Toxicity?

Find out what the EPA says. Lindane meds vs. agricultural use.
www.lindane.com

Bed Bug Killer

Get Immediate Relief From Bed Bugs. Proven Bed Bug Control System!
www.TailManScientific.com

In Other News ...

▶ FDIC halts foreclosure on IndyMac mortgages: Bair

▶ U.S. overseer says IndyMac "safe and sound"

▶ Sleep deprivation raised in bin Laden driver case

▶ Iran president hits back over nuclear criticism

▶ U.S. terrorism watch list tops 1 million

▶ Obama to visit Israel, West Bank next week

▶ Karzai opposes U.S.

Systemic Tree Insecticide

Easy to Use & Environment Friendly. Same Day Shipping. Order Online Now
www.TreeRx.com

Safe Pesticides

Pharm Solutions. Oil Based Spray Combats Common Plant Fungus Safely
www.PlanetGreenSpot.com

Pesticides And Cancer

Learn what really causes cancer and what is an internet myth.
RevolutionHealth.com/Breast-C

Need to cite this story in your essay, paper, or report? Use one of the following formats:

- APA Emory University Health Sciences Center (2006, February 21). Organic Diets Lower Children's Exposure To Two Common Pesticides. *ScienceDaily*. Retrieved July 15, 2008, from <http://www.sciencedaily.com/releases/2006/02/060221090538.htm>
- MLA

Find with keyword(s):

Search

Enter a keyword or phrase to search ScienceDaily's archives for related news topics, the latest news stories, reference articles, science videos, images, and books.

Ads by Google

[Advertise here](#)

Copyright Reuters 2008. See [Restrictions](#).

Coffee Exposed

A shocking secret coffee co's don't want you to know
www.coffeefool.com

Stop Mold In Your Home

Prevent Mold From Worsening Your Health; Mold Test Kits - \$7.95/ea!
HomeMoldTestKit.com

Farming Grants Here

UpTo \$250,000 In Farming Grants. Billions Available. Never Repay!
Farming.iGrantCash.com

Free Subscriptions ... from ScienceDaily

Get the latest science news with our free email newsletters, updated daily and weekly. Or view hourly updated newsfeeds in your RSS reader:

- ▶ [Email Newsletters](#)
- ▶ [RSS Newsfeeds](#)

Feedback ... we want to hear from you!

Tell us what you think of the new ScienceDaily -- we welcome both positive and negative comments. Have any problems using the site? Questions?

Your Name:

Your Email:

Comments:

Click button to submit feedback:

Send It