

## HEALTH &amp; MEDICINE

# Study supports theory autism, vaccines linked

*Scientist: Some children with disorder struggle to protect selves from toxic metals*

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**WALNUT CREEK, Calif.** — A new study sheds light on the mystery of autism and may point the way to a promising treatment.

Some autistic children have a weakened ability to protect themselves from toxic metals in their bodies, a biochemist at the University of Arkansas for Medical Sciences has concluded.

Such children have a severe deficiency of glutathione, the body's most important tool for detoxifying and excreting heavy metals such as mercury and lead, Dr. Jill James reports in a peer-reviewed study published this month in the American Journal of Clinical Nutrition.

James' findings provide new ammunition for those who suspect that mercury-containing vaccines play a role in triggering autism.

The study, which involved 20 autistic children, also suggests a possible intervention for the disorder, which has no known cause or cure.

In an attempt to correct their metabolic imbalance, James gave eight of the participants supplements of folic acid, a form of folic acid, and vitamin B-12. Their glutathione measurements then improved.

The study did not attempt to quantify changes in autistic behavior.

But Dr. Elizabeth Mumper, an associate professor of clinical pediatrics at the University of Virginia Medical School, said she has given similar supplements to many autistic children and noticed a marked improvement in some.

"I don't mean to imply that I can cure autism, but for a subset the results can be dramatic," Mumper said.

Mumper and James said they hope other researchers will attempt to replicate their findings in larger numbers of children.

Most researchers, including James, say there is a strong genetic component to autism.

But some also suspect that one or more environmental factors push genetically vulnerable children over the edge into autism.

James, who worked as a senior research scientist for the Food and Drug Administration for 14 years before joining the University of Arkansas, said there could be several environmental factors that have a cumulative effect on such children.

Pregnant women and children, for example, can be exposed to mercury from fish, amalgam dental fillings and vaccines.

Children can also be exposed to arsenic and chromium in pressure-treated wood, lead in paint, and metals in soil and drinking water.

"All of these heavy metals are additive, and they all deplete this glutathione," James said.

Leaders of the Environmental Working Group, a national organization that seeks to protect children from environmental pollutants, seized upon James' findings to call for additional research into the possibility of an autism-vaccine link.

"These children would be much less able to mount a defense against a contaminant," said Richard Wiles, senior vice president of the group. "We think that this is just incredibly important."

Autism is a severe development disorder that undermines a child's ability to connect with the world.

Autistic children often find it difficult to make eye contact and communicate with others. Many engage in ritualistic behavior such as hand-flapping and following routines.

The number of children diagnosed with the disorder has jumped dramatically in recent years as scientists scramble for answers.