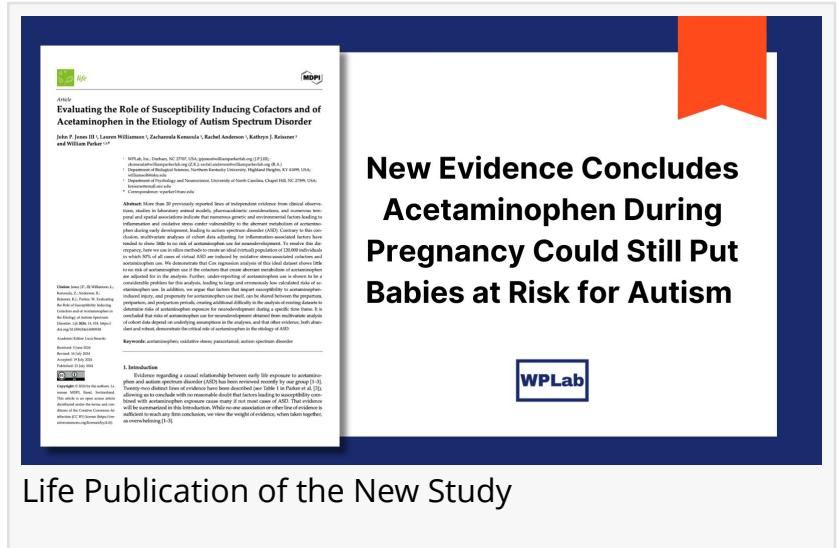


New Evidence Concludes Acetaminophen During Pregnancy Could Still Put Babies At Risk For Autism

Now Published - Evaluating the Role of Susceptibility Inducing Cofactors and of Acetaminophen in the Etiology of Autism Spectrum Disorder

DURHAM, NORTH CAROLINA, UNITED STATES, July 25, 2024

/EINPresswire.com/ -- A new study finds that the potential causal link between acetaminophen exposure during pregnancy and neurodevelopmental disorders such as autism and ADHD could still be real.



Life Publication of the New Study

This new study titled “Evaluating the Role of Susceptibility Inducing Cofactors and of Acetaminophen in the Etiology of Autism Spectrum Disorder” was published this week in Life, an “international, peer-reviewed, open access journal of scientific studies” by a team of scientists.

“

We know that, in babies and children, acetaminophen acts in concert with other factors to cause neurodevelopmental disorders, but we do not know if that occurs during pregnancy.”

William Parker, PhD

[The Life study](#) contradicts a widely publicized study from Drexel University published in JAMA, in April 2024, claiming that no real association between acetaminophen use during pregnancy and autism exists.

Acetaminophen, largely used for the management of pain and fevers, is a commonly used medication that is approved for use during pregnancy.

The JAMA paper claimed that, based on a study of data from Sweden comparing siblings who share genetics and

other variables, acetaminophen is not directly linked to an increase for autism, ADHD, or other intellectual disabilities.

However, an investigative team led by scientist William Parker, claims that critical errors in the analysis of the Swedish data led to misleading conclusions within the Drexel University study.

“We know that, in babies and children, acetaminophen acts in concert with other factors to cause neurodevelopmental disorders, but we do not know if that occurs during pregnancy. To assess what happens during pregnancy, scientists should keep in mind that acetaminophen never acts alone. The Drexel analysis did not consider this as they designed their study, and made a well-documented error in statistical design,” said Parker.

Parker's group identified the error as occurring when the Drexel group set their computers to determine whether multiple factors “OR” acetaminophen caused neurodevelopmental disorders rather than if it was multiple factors “AND” acetaminophen. This caused a dramatic underestimation of the association between acetaminophen use and neurodevelopmental problems in offspring.

The new Life study came out of University of North Carolina, Northern Kentucky University, and WPLab Inc., a private, non-profit research organization, and demonstrated mathematically that the Drexel analysis was not done correctly. The authors conclude that it remains unknown whether acetaminophen use during pregnancy causes autism or other neurodevelopmental problems such as ADHD.

Parker's work on the connection between acetaminophen and autism has been published in numerous peer-reviewed journals, with more than 24 lines of evidence pointing toward the importance of acetaminophen in the induction of autism in susceptible babies and children.

With almost 30 years of experience working at Duke University, Parker now works at the University of North Carolina and runs a private, non-profit research and education organization. He is most well-known for discovering the function of the human appendix as a “safe house” for beneficial bacteria, for pioneering the study of immune function in wild animals, and for making discoveries about the benefits of intestinal worms for mental health.

While numerous other studies have underestimated the contribution of acetaminophen in neurodevelopmental disorders due to the same errors present in the JAMA paper, the JAMA paper was the first study to eliminate the contribution completely.

“There's just not enough evidence to be conclusive, and it's a tragedy that the publicity behind the JAMA paper misled the public with such a critical issue at stake,” said Parker.

###

About Life

A pioneer in scholarly, open access publishing, MDPI has supported academic communities since 1996. MDPI is leading the transition to open science by making more research free and accessible to everyone. Over 3.5 million researchers have entrusted MDPI with publishing their scientific discoveries. MDPI's editorial process is bolstered by a network of dedicated reviewers, a team of over 6000 professional, well-trained staff members, and an in-house article submission platform that was designed to ensure efficient processes within its 430 fully open access titles.

To read the full study, visit <https://www.mdpi.com/2075-1729/14/8/918>.
[Read a more detailed explanation](#) of the science in the Life and the JAMA papers.

About WP Lab

WPLab is a not-for-profit company that conducts research and education related to immune system dysfunction in high-income countries. A current focus is the interaction between the immune system and acetaminophen (paracetamol) early in life, and how that interaction affects brain development. To learn more about WP Lab, visit wplaboratory.org.

William Parker, PhD
WPLab Inc.
wparker1@unc.edu

This press release can be viewed online at: <https://www.einpresswire.com/article/730199351>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2024 Newsmatics Inc. All Right Reserved.