

THE CONNECTION BETWEEN Acetaminophen and Autism

and how it can be explained through associations
with human activities

KEY TAKEAWAYS

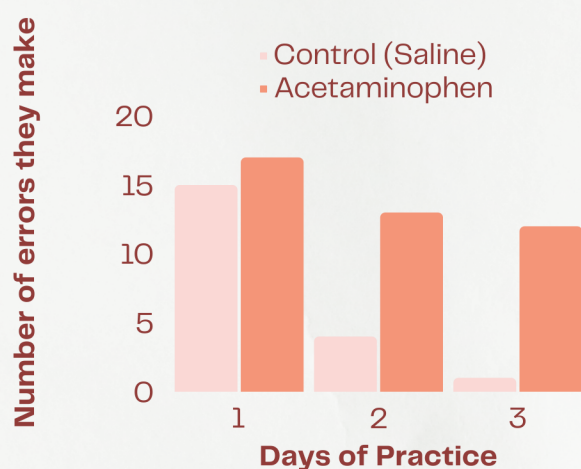
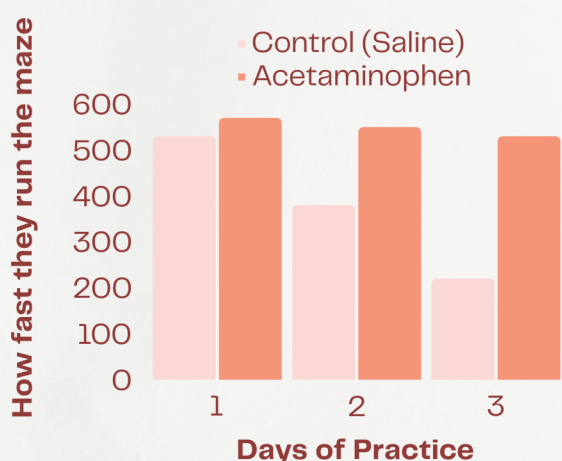
- Laboratory mice and rats develop long-term brain damage and behavioral changes when given acetaminophen at young ages
- Acetaminophen kills nerve cells in the brains of adult lab animals
- In laboratory rats, acetaminophen affects the developing male brain more than the female brain

WHY LAB ANIMALS?

Animals are biologically very similar to humans, they are susceptible to many of the same health problems as humans, and their shorter life cycles enable us to study them throughout their whole life span.

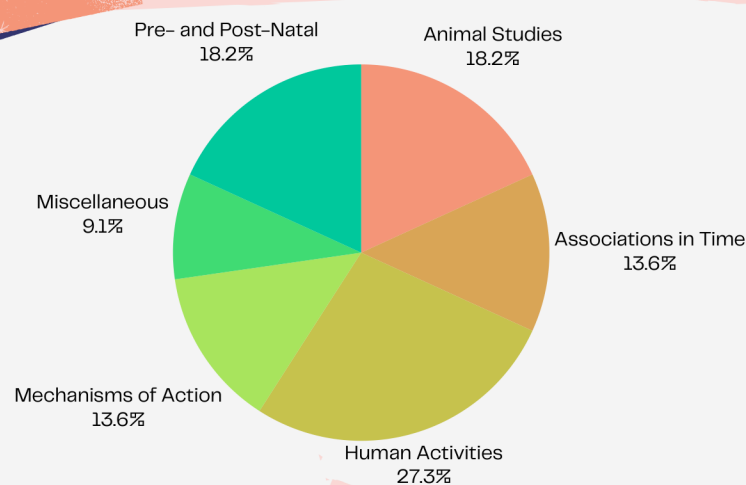
Putting the Pieces Together

Low doses of acetaminophen are lethal in cats because they are deficient in a key enzyme that is also deficient in babies. This has been known for decades, but it was only recently recognized that this might be important for clinical practice.



Exposing Baby Mice to Acetaminophen

A study conducted in Sweden has revealed that exposure to acetaminophen during early life can cause significant and lasting impairment of learning capacity in laboratory mice. Mice treated with acetaminophen shortly after birth had almost no ability to learn a maze later in life, compared to their saline-injected counterparts. [The findings suggest that acetaminophen exposure during early life can lead to a long-term loss of learning ability in laboratory mice.](#)



CATEGORIES OF EVIDENCE

Animal Studies make up 18% of our reasons explaining the connection between acetaminophen and autism.

[Children 2024, 11\(1\), 44](#)