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LINES OF EVIDENCE THAT ACETAMINOPHEN CAUSES AUTISM



Studies in Animals

- Laboratory mice and rats develop long-term brain damage and behavioral changes when given acetaminophen when very young
- Acetaminophen has a greater effect on the male brain
- Acetaminophen kills nerve cells in the brain in adult lab animals

Associations in Time

- Circumcised individuals have a 2 times greater chance of getting infantile autism
- An unexpectedly high prevalence of autism identified when acetaminophen products for children were repeatedly found to have too much active ingredient
- Orthodox Jews, who do not traditionally use acetaminophen, have a substantially lower prevalence of autism
- Acetaminophen given with a vaccine is connected to autism, but vaccination alone is not
- Up to 50% of parents who have a child with autism believe that vaccines were involved in the induction of their child's autism. This can be explained by the simultaneous administration of acetaminophen with vaccines

The Mechanism Makes Sense

- Individuals with cystic fibrosis have metabolism that effectively deals with acetaminophen, and they are not prone to have autism
- Children with autism cannot metabolize acetaminophen well
- Acetaminophen is known to be highly toxic in the presence of oxidative stress (when there's too many things for the body to "burn" or clean out)

Pre-and Post-natal Associations

- Babies with postnatal acetaminophen exposure were found to be 30% more likely to have autism
- Use of acetaminophen during pregnancy is connected to long-term effects such as lower IQ, ADHD, and autism
- Higher levels of acetaminophen in the baby's umbilical cord at the time of birth is strongly associated with autism
- Acetaminophen use during childhood is connected to a 20-times increase in regressive autism

Associations with Human Activities

- Ratio of regressive (child hits early development milestones and then regresses backwards) to infantile (child doesn't appear to ever hit developmental milestones) autism rose at the same time acetaminophen replaced aspirin in the market
- Autism increased at the same time that acetaminophen started replacing aspirin in the market
- As direct-to-consumer advertising increased, use of acetaminophen and autism also rose in prevalence

Miscellaneous

- Acetaminophen has never been proven to be safe for children
- Multiple studies show acetaminophen affects the social function of the brain in adults