

# Tylenol Research

# Acetaminophen (Tylenol) in Pregnancy and Neurodevelopment

*A quick reference for moms*

## 1. Mount Sinai Systematic Review (2021, updated 2025)

- **Type:** Systematic review of 29 studies, 220,000+ mother–child pairs
- **Finding:** Consistently reported **positive association** between prenatal acetaminophen and autism/ADHD. Some studies show dose–response.
- **Link:** [Mount Sinai Newsroom summary](#)

## 2. Ahlqvist et al. (JAMA, 2024, Sweden)

- **Type:** Nationwide cohort, 2.5M children + sibling comparisons
- **Finding:** Modest associations in the full cohort. **No link when comparing siblings** (controls for family factors).
- **Link:** [JAMA full text](#)

## 3. Prada et al. (Environmental Health, 2025)

- **Type:** Systematic review & meta-analysis
- **Finding:** Reported **evidence of a link** with autism/ADHD, including dose–response.
- **Link:** [Environmental Health – Prada et al. 2025](#)

## 4. Liew et al. (International Journal of Epidemiology, 2016, Denmark)

- **Type:** Danish National Birth Cohort, 64,322 children
- **Finding:** Higher risk of autism **with hyperkinetic symptoms**, and longer use = stronger effect.

- **Link:** [Maternal use of acetaminophen and risk of autism](#)

## 5. Umbilical Cord Biomarker Study (JAMA Psychiatry, 2019, Johns Hopkins)

- **Type:** Biomarkers in umbilical cord blood
- **Finding:** Higher fetal acetaminophen adduct levels → **increased risk of autism & ADHD** in dose–response pattern.
- **Link:** JAMA Psychiatry – Cord biomarkers study

## 6. European Cohorts Meta-Analysis (2021, 73,000 children)

- **Type:** Six European birth cohorts
- **Finding:** Prenatal acetaminophen exposure → **19% higher risk of autism symptoms** and **21% higher risk of ADHD symptoms**.
- **Link:** European Journal of Epidemiology study

## 7. Bühner et al. Review (Frontiers in Public Health, 2021)

- **Type:** Narrative review
- **Finding:** Across studies, prenatal acetaminophen linked to **~25% higher risk of neurodevelopmental disorders** on average.
- **Link:** Frontiers – Paracetamol and the Developing Brain

## 8. Harvard / Public Health News (2021)

- **Summary:** “Using acetaminophen during pregnancy may increase children’s autism and ADHD risk.” Recommended lowest effective dose for the shortest time.
- **Link:** [Harvard T.H. Chan School of Public Health News](#)