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Here's Why You Should Avoid Acetaminophen Use During Pregnancy

Analysis by Dr. Joseph Mercola | January 29, 2024

STORY AT-A-GLANCE

- Although most consumers believe that over-the-counter medications are safe and effective, recent data offers more evidence that acetaminophen during pregnancy increases your child's risk of attention deficit hyperactivity disorder (ADHD)
- Using acetaminophen during pregnancy can also increase your child's risk of autism spectrum disorder (ASD). Acetaminophen is found in over 600 medications that are commonly consumed, making it easy to cross the line between a safe dose and a harmful one
- Data show that children who are exposed to acetaminophen after birth to reduce fever and discomfort after vaccination may also have an increased risk of autistic disorder
- I believe it's important to stay away from as many potential toxins as possible to protect the health of your child. Besides steering clear of alcohol, street drugs and unnecessary prescription drugs, consider avoiding plastic children's toys, using glass for food and beverage storage, installing a whole-house water filter, using only natural cleaning products and toiletries, and avoiding any products with "fragrance"

In general, most consumers believe that over-the-counter medications are both helpful and safe. The results of one survey[1] showed that as familiarity with the product grew, so did the consumers' impression of the safety and efficacy of the product. The American College of Obstetricians and Gynecologists (ACOG) warns pregnant women to avoid substances that are not required for medical reasons to support a healthy pregnancy.[2]

Despite mounting evidence to the contrary, ACOG, obstetricians and gynecologists from across the U.S. have typically identified acetaminophen (Tylenol) as a safe pain reliever for pregnant women.[3] Yet, another study[4] published in January 2024 found an increased risk of attention deficit hyperactivity disorder (ADHD) in children when mothers used acetaminophen, particularly during the second trimester.[5]

According to the Centers for Disease Control and Prevention,[6] roughly 6 million children aged 3 to 17 years were ever diagnosed with ADHD. This is 9.8% of the population using data extracted from 2016 to 2019. Additionally, that number rose dramatically between 2003 and 2011, from 4.4% to 6.4% of the general population.

ADHD is a neurodevelopmental disorder that affects an individual's ability to manage their attention, stay organized, and control their behavior. Data also show that 64% of those with ADHD also have at least one other mental, emotional, or behavioral disorder.[7] While the featured study focused on the neurological implications in children, other data show how acetaminophen affects behavior in adults.

Acetaminophen is found in over 600 medications and is one of the most consumed drugs in the U.S. Researchers tested the hypothesis that 1,000 mg could influence judgment and decisions. In three double-blind, placebo-controlled studies in healthy adults, they found acetaminophen increased risk-taking behavior.[8] The most recent data demonstrate that exposure during pregnancy may increase a child's risk of symptoms of ADHD.

Acetaminophen During Pregnancy Linked to ADHD in Children

In a 2021 consensus paper[9] researchers called for precautionary action in the use of acetaminophen (paracetamol) in light of increasing research data that suggests it may alter fetal development. The review triggered a response from ACOG in which they wrote that there is "no clear evidence that proves a direct relationship between the prudent use of acetaminophen during any trimester and fetal developmental issues."[10]

The most recent paper to support data that acetaminophen during pregnancy could affect neurological development in children was part of the Illinois Kids Development Study that involved tracking prenatal chemical exposure. The data showed that in women who had higher acetaminophen usage during the second trimester, there was an increase in attention-related problems and ADHD-type behavior.[11]

The researchers used the Child Behavior Checklist (CBCL) to identify behaviors associated with attention deficit and found increased scores at ages 2, 3 and 4 years.[12] The association appeared to be dose-related, as women with higher exposure during the second trimester had children with higher CBCL scores for attention problems, ADHD and externalizing behavior.

Children whose mothers had a higher cumulative exposure across the entire pregnancy had increased scores for attention problems and ADHD at ages 2 and 3. Megan Woodbury led the research as a graduate student alongside comparative biosciences Professor Emerita Susan Schantz. A recent study by these scientists also found that exposure to acetaminophen during pregnancy led to language delays in children.[13]

One difference between this study about exposure to acetaminophen during pregnancy and past studies was that researchers in the current study asked pregnant women about acetaminophen use six times during the course of their pregnancy while in other studies they were asked at most once per trimester. Caregivers were also asked dozens of standardized questions about their children's behavior.

"The kinds of behaviors the caregivers reported included things like the child talking out of turn, not paying attention, not being quiet when they were supposed to be quiet, not sitting down when they were supposed to be sitting down, and being a little aggressive with other children," Schantz said.[14]

Acetaminophen During Pregnancy Also Raises Risk of Autism

A study[15] published in 2020 in JAMA Psychiatry strengthened the link between acetaminophen use during pregnancy and ADHD and the risk of autism spectrum

disorder (ASD). According to the authors:

> *"Prior studies have raised concern about maternal acetaminophen use during pregnancy and increased risk of attention-deficit/hyperactivity disorder (ADHD) and autism spectrum disorder (ASD) in their children; however, most studies have relied on maternal self-report …*
>
> *In this cohort study of 996 mother-infant dyads from the Boston Birth Cohort, cord plasma biomarkers of fetal exposure to acetaminophen were associated with significantly increased risk of childhood attention-deficit/hyperactivity disorder and autism spectrum disorder."*

Of the 996 participants, only 32.8% were neurotypical, 25.8% had only ADHD, 6.6% had only autism, 4.2% had both ADHD and autism and 30.5% had other types of developmental delays. The association also appeared to be dose dependent. The researchers measured cord plasma biomarkers for acetaminophen and found those in the first tertile had a far lower risk of diagnosis of ADHD and ASD than those in the second and third tertiles.

The researchers concluded that the biomarkers in cord blood of fetal exposure to acetaminophen were significantly associated with an increased risk of diagnosis of childhood ADHD and autism in a dose-response fashion, writing that their findings "support previous studies regarding the association between prenatal and perinatal acetaminophen exposure and childhood neurodevelopmental risk."[16]

As I reported in 2021, **more data document disturbing links** between acetaminophen use during pregnancy and neurological problems in children, including poor gross motor development, communication issues, increased risk of preeclampsia, and a moderately increased risk of undescended testicles and boys.

Data also shows that acetaminophen used after birth may also be linked to an increased risk of autism. In a small study published in 2008, the researchers concluded that using acetaminophen after vaccination may increase the risk of autism, writing

"acetaminophen use after measles-mumps-rubella vaccination was associated with autistic disorder."[17]

While parents give babies and infants Tylenol for numerous reasons, one instance in which Tylenol is routinely used is after childhood vaccinations. According to 2009 research[18] published in the journal Lancet, acetaminophen might render vaccinations less effective when administered together.

Infants who received acetaminophen right after getting a vaccination experienced lowered immune response and developed significantly fewer antibodies against the disease they were vaccinated against.

Acetaminophen During Pregnancy Associated With More Risks

In addition to the risks to babies during pregnancy, acetaminophen use can also increase risks to the mother and other adults. Overdose is responsible for nearly half of all acute liver failure cases in the U.S.[19] While it is considered safe when taken as recommended, the margin between a safe dose and a lethal one is small.

Additionally, you may not always recognize that the over-the-counter drugs you are taking contain acetaminophen. Harvard Health[20] recommends caution when dishing out acetaminophen as it is often contained in many other over-the-counter medications.

Acetaminophen pills are available in 325 mg, 500 mg or 650 mg. If you take two 500 mg pills three times a day, you have quickly reached the low end of the recommended dose range. Acetaminophen is metabolized in the liver, so drinking alcohol can cause the liver to convert acetaminophen into a toxic by-product. It is important to recognize that acetaminophen sickens tens of thousands of people every year, and kills several hundred more.

Tips for a More Toxin-Free Pregnancy

I believe it is essential to abstain from as many potential toxins as possible to protect the health of your child. Our environment is saturated with a wide variety of toxic substances, so you may not be able to defend against each one. However, you have a great deal of control over the medications you take and within your immediate household.

For example, it's important to understand the chemicals you ingest in your food and drink and what's absorbed through your skin from the household and personal care products you use. Each of these can have an impact on your child's development and long-term health. In the past few decades, the prevalence of ADHD and autism have both skyrocketed, which indicates that something is going terribly wrong in the environment.

Unfortunately, our children are paying the price for a chemical-laden lifestyle, including the overuse of over-the-counter drugs like acetaminophen. Consider avoiding any unnecessary drugs or medications, including the COVID jab, which the CDC has **officially recommended for pregnant women**. This can have long-lasting ramifications for your child and your future reproductive health.

As much as you're able, buy and eat organic produce and grass fed, pastured animal foods to reduce your exposure to agricultural chemicals like glyphosate and others. Don't eat processed, prepackaged foods of any kind, which helps you automatically avoid pesticides, artificial food additives, dangerous artificial sweeteners, food coloring, MSG and unlabeled genetically engineered ingredients.

Avoid conventional or farm-raised fish, which are often heavily contaminated with PCBs and mercury. **Wild-caught Alaskan salmon** is one of the very few fish I still recommend eating, as well as small fatty fish like anchovies, sardines, mackerel and herring. If you don't eat these on a regular basis, consider taking a krill oil supplement to optimize your omega-3 level.

Store your **food and beverages in glass** rather than plastic, to avoid exposure to plastic chemicals known to disrupt endocrine function, and avoid using plastic wrap

and canned foods.

Install an appropriate whole-house **water filter** on all your faucets (even those in your shower or bath).

Only use **natural cleaning products** in your home.

Switch over to **natural brands of toiletries** such as shampoo, toothpaste, antiperspirants and cosmetics. The Environmental Working Group has a great database[21] to help you find safer personal care products.

Avoid artificial air fresheners, dryer sheets, fabric softeners or other synthetic fragrances. Relinquish the idea that **fragrance** equals "clean." It doesn't. Clean laundry does not smell like anything at all.

Replace your **nonstick pots and pans** with ceramic or glass cookware to avoid toxic PFOA chemicals.

When shopping for baby items, look for "green" toxin-free alternatives. **Avoid plastic toys**, especially teething toys, and make sure items like mattresses, car seats and nursing pillows do not contain toxic flame-retardant chemicals.

Replace your vinyl shower curtain with one made of fabric or install a glass shower door. Most flexible plastics, like shower curtains, contain dangerous **plasticizers like phthalates**.

Sources and References

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