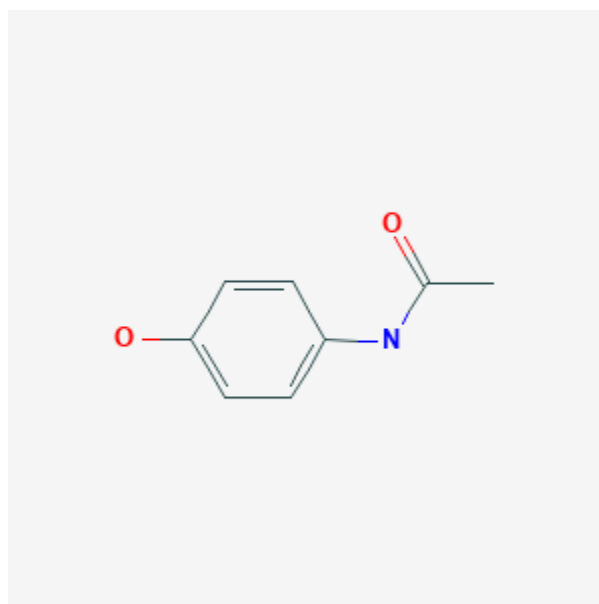




## Acetaminophen

Revised: October 31, 2018.

CASRN: 103-90-2



## Drug Levels and Effects

### Summary of Use during Lactation

Acetaminophen is a good choice for analgesia, and fever reduction in nursing mothers. Amounts in milk are much less than doses usually given to infants. Adverse effects in breastfed infants appear to be rare.

### Drug Levels

*Maternal Levels.* A single oral dose of 650 mg of acetaminophen was given to 12 nursing mothers who were 2 to 22 months postpartum. Peak milk levels of 10 to 15 mg/L occurred between 1 and 2 hours after the dose in all patients. Acetaminophen was undetectable (<0.5 mg/L) in all mothers 12 hours after the dose. The authors calculated that an infant who ingested 90 mL of breastmilk every 3 hours would receive an average of 0.88 mg of acetaminophen or 0.14% (range 0.04 to 0.23%) of the mother's absolute dosage.[1] Using data from this study, an infant would receive a maximum of about 2% of the maternal weight-adjusted dosage.

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Three women took a single 500 mg dose of acetaminophen. Peak milk levels averaging 4.2 mg/L occurred within 2 hours after the dose.[2] Using data from this study, an infant would receive a maximum of about 3.6% of the maternal weight-adjusted dosage.

Four women who were 2 to 8 months postpartum were given a single 1 gram dose of acetaminophen. Peak milk levels occurred between 1 and 2.5 hours after the dose. The authors estimated that a breastfed infant would receive an average of 1.1% and a maximum of 1.8% of the maternal weight-adjusted dosage. This dose is about 0.5% of the lowest recommended infant dose of acetaminophen.[3]

*Infant Levels.* No acetaminophen was detected in the urine of 12 breastfed infants aged 2 to 22 months after maternal ingestion of 650 mg of acetaminophen.[1]

Urine was collected for 1 to 3.5 hours after nursing in 6 infants aged 2 to 6 days whose mothers received 1 to 2 grams of acetaminophen 2 to 4 hours before nursing their infant. Infants excreted an average of 401 mcg of acetaminophen and its metabolites in urine during the collection interval. These neonates excreted a greater percentage of drug as acetaminophen and much less as the sulfate metabolite than adults.[3]

## Effects in Breastfed Infants

A maculopapular rash on the upper trunk and face of a 2-month-old infant was probably caused by acetaminophen in breastmilk. The rash occurred after 2 days of therapy in the mother at a dose of 1 gram at bedtime. It subsided when the drug was discontinued and recurred 2 weeks later after another acetaminophen dose of 1 gram was taken by the mother.[4]

Two papers report 14 women who breastfed after taking acetaminophen or its prodrug phenacetin with no adverse effects to their infants.[1][5]

In a telephone follow-up study, mothers reported no side effects among 43 infants exposed to acetaminophen in breastmilk.[6]

Two clinicians speculated that breastmilk exposure to acetaminophen during breastfeeding might be a risk factor for asthma and wheezing in the breastfed infants based on their personal observations.[7] However, these observations were uncontrolled and cannot be considered to be valid proof of an association.[8]

## Effects on Lactation and Breastmilk

Relevant published information was not found as of the revision date.

## Alternate Drugs to Consider

Ibuprofen

## References

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8. Bakkeheim E, Carlsen KH, Lodrup Carlsen KC. Paracetamol exposure during breastfeeding and risk of allergic disease. *Acta Paediatr.* 2011;100:e3.

## Substance Identification

### Substance Name

Acetaminophen

### CAS Registry Number

103-90-2

### Drug Class

Breast Feeding

Lactation

Analgesics, Non-Narcotic