

## **Breastfeeding & Epilepsy**

There are many benefits of breastfeeding to both baby and mom. For babies, breastfeeding lowers the risk of lower respiratory tract infections, otitis media, gastroenteritis, diabetes, leukemia, and sudden unexpected death (1). For the mother, there is a decreased risk of breast cancer, ovarian cancer, and postpartum depression (2,3).

It is important to note that while all anti-seizure medications (ASMs) can be transmitted in breast milk to a certain degree, most studies on ASM transfer through breastmilk report that infant serum ASM levels are much lower than that of pharmacological effect. Some ASMs, such as benzodiazepines and barbiturates, have the potential to reach significant levels, and thus the baby should be monitored for lethargy and poor weight gain (4).

Additionally, a study published in 2014 by Meador et al showed that children exposed to specific anti-seizure drugs (specifically carbamazepine, lamotrigine, phenytoin, and valproate) in breastmilk had higher IQs and language scores at the age of 6 when compared to those children whose mothers were taking ASMs and did not breastfeed. In general, no adverse effects were found on the developmental outcomes related to breast milk exposure to the studied drugs (5, 6).

Data from the MONEAD study (7) on medication levels from 164 matched pairs of mothers and breastfeeding infants should further increase support of breastfeeding by women with epilepsy as it demonstrates significantly lower exposure (0.3%-44.2%) through breastmilk than in utero (~100%) for the child (8). In 49% of the infants, the ASM concentration was below the lower limit of detection. The median infant to mother ASM concentration was 28.9% for lamotrigine, 5.3% for levetiracetam (71% with undetectable levels), 0.3% for oxcarbazepine, 44.2% for zonisamide, 5.7% for carbamazepine, 17.2% for topiramate, and 21.4% for valproate.

Most epileptologists recommend women to breastfeed their infant as the benefits of breastfeeding are felt to outweigh the risks.

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