

Mercury may Leach into Breast Milk



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Mercury poisoning is a growing health concern. We are exposed to mercury in the workplace, in the environment, in our homes (paint, thermometers), through dental fillings (amalgams), by eating certain fish, through vaccines and via a slew of other sources. Mercury toxicity can affect the brain and nervous system, the kidneys, the heart and many organs and systems of the body. There is no question that mercury is a toxic metal—more deadly than lead.

Mercury is not only a concern for our health, it is a concern for the health of breast-feeding infants. Most manufacturers of dental amalgams do not recommend installing mercury fillings during pregnancy and breast-feeding. In Germany, mercury amalgams are not advised during pregnancy. But what happens if you already have mercury amalgam fillings in your mouth and plan on breast-feeding your infant? Current research shows that mercury, originating from dental amalgams or from fish consumption, crosses into breast milk.

A study was conducted at the Institute of Forensic Medicine in Munich, Germany on mercury concentration in human breast milk from mothers with and without mercury amalgams. A total of 70 breast milk samples were taken and analyzed from mothers within the first seven days after delivery and nine samples of formula milk were also analyzed for comparison. The study showed that mercury concentration in breast milk ranged from <0.2 ug/L to 6.86 ug/L. Mercury concentration in breast milk samples correlated directly with the number of dental amalgams in the mothers.

Mercury concentrations were found to be highest in colostrum, the first milk secreted by a lactating mother, which is usually rich in maternal white blood cells and immune proteins (immunoglobulins). After the first three days of lactating, mercury concentration in breast milk was found to be equal or even lower than formula milk. The authors concluded that a breast-fed infant is at higher risk of receiving mercury from a mother having mercury amalgams in her teeth, particularly in the first few days of breast-feeding. Another study conducted at the Social and Environmental Medicine Department of the University Erlangen-Nuremberg, Germany found similar results.

Breast milk samples of 118 women were collected in the first week after birth. After two months of breast-feeding, a second breast milk sample was collected. The concentration of mercury in the breast milk collected immediately after birth showed a significant association with the number of amalgam fillings in the mother as well as with the frequency of fish consumption. After two months of lactation, the breast milk concentrations were lower than the first sample and were positively associated with the frequency of fish consumption. Another study of 88 mothers at the Faroe Islands, where the seafood diet includes pilot whale meat and blubber, showed that the mercury concentration in breast milk was associated with the frequency of fish consumption during pregnancy.

In addition to the mercury reported in breast milk, one study has shown that mercury can travel from a mother with mercury amalgams to the fetus.

Is the mercury in breast milk a concern?

We have little information regarding what mercury levels could be considered safe in infants. An infant is affected differently than an adult. The tissue levels of mercury can reach higher levels in newborns than adults due to their low body weight and high food consumption per kg of body weight. Infants are also more susceptible to toxicity. A newborn experiences rapid changes in organ development and function. During this period, the central nervous system is growing rapidly and is highly vulnerable to toxins, such as mercury. Also, metals tend to be more easily absorbed by infants. Infants also have less effective renal excretion and less effective blood-brain barrier than adults, therefore even small amounts of mercury can be more toxic to infants.

Given the advantages associated with breast-feeding, nursing mothers should consider the possible risks associated with long-term exposure to milk contaminants. Speak to your licensed health care practitioner regarding the risks for you and your infant.