

DOES MERCURY FROM AMALGAMS GET INTO THE MOTHER'S BREAST MILK?

Vimy MJ, Hooper DE, King WW, Lorscheider FL. Mercury from maternal "silver" tooth fillings in sheep and human breast milk. A source of neonatal exposure. Biol Trace Elem Res 56(2):143-152 (1997)

ABSTRACT: " Neonatal uptake of mercury (Hg) from milk was examined in a pregnant sheep model, where radioactive mercury (Hg203)/silver tooth fillings (amalgam) were newly placed. A crossover experimental design was used in which lactating ewes nursed foster lambs. In a parallel study, the relationship between dental history and breast milk concentration of Hg was also examined in 33 lactating women. Results from the animal studies showed that, during pregnancy, a primary fetal site of amalgam Hg concentration is the liver, and, after delivery, the neonatal lamb kidney receives additional amalgam Hg from mother's milk. In lactating women with aged amalgam fillings, increased Hg excretion in breast milk and urine correlated with the number of fillings or Hg vapor concentration levels in mouth air. It was concluded that Hg originating from maternal amalgam tooth fillings transfers across the placenta to the fetus, across the mammary gland into milk ingested by the newborn, and ultimately into neonatal body tissues. Comparisons are made to the U. S. minimal risk level recently established for adult Hg exposure. These findings suggest that placement and removal of "silver" tooth fillings in pregnant and lactating humans will subject the fetus and neonate to unnecessary risk of Hg exposure."