Abstract


Manganese and birth outcome.

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BACKGROUND: Manganese is an essential mineral nutrient needed for proper fetal development and other important aspects of metabolism. However, manganese excess can have a potent neurotoxicity effect, especially in infants. Little is known about the effects of manganese deficiency or excess on the developing human fetus.

FINDINGS AND CONCLUSIONS: The findings of two recent studies indicate that lower maternal blood manganese is associated with fetal intrauterine growth retardation (IUGR) and lower birth weight. In light of the importance of IUGR and birth weight on neonatal morbidity and mortality, additional basic studies of maternal and fetal manganese physiology are needed, as well as more epidemiologic studies in different populations of the association of manganese exposure and birth outcome.

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