

TRACE ELEMENT DEFICIENCY: A POSSIBLE EXPLANATION OF EARLY ABORTION IN GOATS

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A total of 59 goats in the first 50 days of pregnancy among 206 pregnant does reared in the State of Ceara-Sobral (North Eastern Brazil), giving a mean incidence of 29%. Primarily, we thought that this high incidence of abortions was of infectious origin. However microbiological culture, histological and serological examinations of placenta, fetus and maternal blood samples were negative in all prospected areas. Later on, maternal blood samples were examined for their concentration in some elements. The results showed very low levels of Iodine

(1.6-4.0 mcg/dl.), Magnesium (0.1 mcg/ml), Manganese (0.6-1.51 mg%) and Phosphorus (2.56-5.88 mg%). The low levels of these elements in the maternal blood corresponded with low levels of the same elements in the normal diet of goats during the dry season. Since we hypothesize that the high incidence of early abortion is associated with deficiencies in Iodine, Manganese and Phosphorus, further studies, including studies of aborting and nonaborting goats, will be conducted to test if these deficiencies may actually provoke abortion.

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