A prospective study was conducted in a dairy herd with endemic bovine tuberculosis (BT) to assess the risk attributed to raw milk in feeding calves during the artificial rearing. After birth, calves had a period of 24 hours of weaning and then they were separated into two groups with different feeding. The exposed group consumed a mixture of raw milk from cows from a general herd and the unexposed group consumed a milk substitute for a period of 2 to 90 days. Three days prior to removal from the artificial rearing, all calves were subjected to the tuberculin test applied in the caudal fold (CFT) to detect exposure to M. bovis. The incidence of BT was 65% for the exposed group and 46% in unexposed group. Calves consuming raw milk were 40% more likely to be exposed to M. bovis than calves consuming milk substitute. Complementary studies in calves that resulted positive to the CFT was due to M. bovis. However, the attributable risk to raw milk consumption was 19%, indicating that other factors could be involved in the transmission. Future studies should be done to evaluate the role of other factors that could be involved in the epidemiology of endemic BT in dairy herds.

**Keywords**
Bovine tuberculosis, calf, raw milk, risk, exposed.