

## **Occurrence of *Toxoplasma gondii* infection in slaughtered equidae in Triângulo Mineiro region, Minas Gerais State, Brazil.**

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Toxoplasmosis is a zoonosis with a large worldwide distribution and affects all warm-blooded vertebrates, including human beings. *Toxoplasma gondii*, its etiological agent, is able to infect their hosts by several transmission paths. The main routes of infection in the epidemiological chain of toxoplasmosis are the ingestion of tissue cysts present in raw and undercooked meat and ingestion of infective oocysts present in contaminated water and food. Thus, food animals have a prominent position in this chain because, when infected, can carry the protozoa to human population with the habit of consuming their meat or meat products. Consumption of equidae meat is more and more common in European and Asian countries. In addition, donkey milk has been increasingly consumed in certain locations. Brazil is among the ten largest equidae meat exporters in the world whilst Asian and European Union countries are the main consumers. The present study aimed to evaluate the occurrence of anti-*Toxoplasma gondii* antibodies in serum samples from 400 slaughtered equidae (192 horses and 208 donkeys), intended for export, in slaughterhouses in the Triângulo Mineiro region, Minas Gerais State, Brazil, by indirect immunofluorescence antibody test. Alongside, epidemiological data were collected through a questionnaire for statistical analysis in order to identify possible risk factors for the population studied. Antibodies against *T. gondii* were found in 13,5% of the equidae, where the occurrence in horses (18,75%) was bigger than in donkeys (8,65%) and in the animals from Goiás state. There is an association between seropositivity and the following variables: species, presence of cats in the farms, hometown, creation purpose, and source of water to animal consumption ( $p \leq 0,05$ ). Therefore, preventive measures should be taken by the farms which create these animals so that there is control of *T. gondii* infection in these species, preventing the transmission to the human population that will consume their meat.

**Keywords:** *Toxoplasma gondii*, equidae, serology, Triângulo Mineiro