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Seroprevalence of *Toxoplasma gondii* in pork and lamb meat at retail in Canada using a commercial ELISA kit

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Toxoplasma gondii is a parasite with multiple public health implications worldwide. Ingestion of undercooked meat is one of the multiple transmission routes involved in human toxoplasmosis. The data required to asses the risk of consuming these products are either non-existent or outdated among different meat commodities. This project aims to estimate the prevalence and to quantify *T. gondii* in pork and lamb retail meat in Canada. So far, 392 meat samples have been purchased in food stores across five provinces. Meat juice from pork and lamb samples were screened for antibodies against *T. gondii* using commercial ELISA kits from Prionics. Given the high predictive value of seroprevalence for the detection of parasite DNA in pork and lamb, serological detection was used in these two animal species in a screening purpose to minimize the cost and time related to molecular detection. To date, 235 pork samples have been tested with this host specific commercial ELISA kit. None of the pork samples have reached the 20% threshold for positivity compared to the positive control provided in the kit. To date, 45 lamb samples have been tested with an ELISA kit specific to small ruminants. Four lamb samples have reached the threshold established at 20% of positivity. Our preliminary seroprevalence in lamb meat is 8.9% with an exact confidence interval between 2.5% and 21.2%. The preliminary results of this experiment suggest that lamb products consumed by Canadians are more frequently contaminated by *Toxoplasma gondii* than pork.