## <u>Cairo University</u> <u>Faculty of Veterinary Medicine</u> <u>Zoonoses Department</u>



## Seroepidemiological studies of sarcosporidiosis in animal and Man in Egypt

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For the degree of PhD. (Zoonoses)

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## **Abstract**

This work was carried out to study the occurrance of Sarcosporidiosis in meat samples from different abbatoirs in cairo and Giza governorate and the occurance of sarcocystis spp. in different meat product(canned beef, beef burger and beef luncheon) from different retail market. A total of 103 slaughtered cattle, buffaloes and 140 different meat product were collected and examined in lab. while human samples included 41 stool sample and 71 serum samples were taken to detect the occurance of antisera antibodies of sarcocystis. The occurance of sarcocystis infection was 60% in cattle, 69% in buffaloes and 7.14% in beef burger. No sarcocysts sporocyst were detected in stool samples of human while occurance of antisera antibodies in human serum was 15.4%. Application of RFLP –PCR technique on 11 representative samples found that different restriction pattern indicate multiple infection with sarcocystis spp. . Moreover a phylogenetic tree applied on 5 gene sequence submitted to Genbank and those retrieved from Genbank indicating homologus between sarcocystis spp. in cattle and buffaloes.

(**Key words**: Sarcosporidiosis-beefburger-meatproduct- cattle –buffaloes-phylogenetic tree)

## **Dedication**

I dedicate this work to my parents and brothers for all kind support they lovely offered during my post-graduate studies

To my husband **Eslam Mahmoud Mohamed**, Thank you for always being with me and always share me my happiness and success moments.

I wish to express my great gratitude to my colleagues in the department of zoonoses specially **Dalia Anwar Hamza**.

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