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Influence of administration of *Capparis spinosa* honey on immune response of infected rats with *Toxoplasma gondii*

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This study conducted to investigate the immunological responses of rats infected with *Toxoplasma gondii* and treated with 15% *Capparis spinosa* honey (Saudi Arabia) supplemented orally for a period of 35 days. Immune response of rats was evaluated weekly. Cytokines were detected in honey supplement either in non-infected or infected. Mortality and morbidity rate were assayed where the lymphoid organs weight were determined. The results revealed that oral administration of honey as a natural feed additive through the experiment reduced mortality rates, increase in body weight, lymphoid organ weight. Also antibody titer was raised. Serum levels of cytokines were consistently higher in the infected and honey supplemented rats compared with controls. Serum levels of IFN- γ , IL-1 and IL-6 were elevated only at day 14 post- infection.

Biography

Ahmed G Hegazi is currently a Professor of Microbiology and Immunology in the National Research Center, Egypt. He has received his Master's degree in 1979 and his PhD in 1981. He has been the Principal Investigator on multiple research projects within the National Research Center. He has published 211 scientific papers and articles in national and international journals. He has served on the board of multiple national and international scientific journals. He is also the President of the Egyptian Environmental Society for Uses and Production of Bee Products, Secretary of the Egyptian Society of Apitherapy, Secretary General of the African Federation of Apiculture Associations and a Member of the International Apitherapy Commission (APIMONDIA). He has received several awards which include First Class Decoration of Excellence (1995), The Senior Scientist Prize of National Research Center, (1996), The National Scientific Prize In Biological Sciences (1990), The Scientific Prize of The National Research Center (1989), 2 Bronze Medals from The International Innovation Fair of the Middle East, Kuwait (2007), awarded Ghazi Wad Allah Salon Prize (2008) and has 4 patents to his credit.

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