**Immune enhancer activity of honey**

**Background:** Apitherapy referred to uses of honeybee products for therapeutic purposes. The apitherapy term comes from the Latin apis, which means “bee,” or bee therapy. Bee products included venom, bee pollen, raw honey, royal jelly, and propolis. These products from bees that are generally considered to have medicinal effects. A great interest in last decade of biologist, medical doctors and scientists are directed due to their biological and phytochemical activities of apitherapy.

**Objective:** The aim of this review was evaluated the immune enhancer activity of Honey.

**Conclusion:** Honey contain physiologically active substances from floral origin of bee and plants. Honey acts upon both innate and adaptive immune response. At different levels, in the human innate response, these compounds decrease proinflammatory cytokine synthesis (IL-2, IL-12 and IL-4), inactivate both the classical and alternative complement pathway, and decrease superoxide anion production in neutrophils. Where in adaptive immune response, honey induce the increase of antibody production by plasma cells, enhance the secretion of TGF-β after the activation of T regulatory cells.

**Biography**

Ahmed Hegazi is currently a Professor of Microbiology and Immunology in the National Research Center, Egypt. Prof. Hegazi received his master’s degree in 1979, and his PhD in 1981. Hegazi’s research work has been focused lately on bee products and their therapeutic effects. Hegazi organized and contributed to national and international research projects since 1977 and up till now; he has been the principal investigator on multiple research projects within the National Research Center. He has published 207 scientific papers and articles in national and international journals. He also served on the board of multiple national and international scientific journals.