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CATALASE ACTIVITY AND IMMUNOSTIMULATORY OF HOT WATER AND VITAMIN C

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ABSTRACT

Introduction: The world is testifying a difficult time with the coronavirus disease (COVID- 19) which was declared a pandemic by the World Health Organization (WHO) on March 11th, 2020. Various symptoms of patients infected with COVID-19 indicated the importance of immune regulation in the human body. So, the immune system is regulated by stimulating the immune cells which has recently been confirmed by the use of quantitative methods for the exploration of the activity of the reticuloendothelial system (RES) with plant extracts by the immune modulation. **Methodology:** In this study we have evaluated the immunostimulatory activity of Haqua Revitalize Therapy-HART (hot water at 50°) and compared it with vitamin C at the dose 500 mg/kg in mice and determination of catalase concentrations. **Results:** Our results show that the treatment with hot water and vitamin C increased the phagocytic activity of the reticuloendothelial system (SRE), the corrected phagocytic index α and decreased the rate of carbon clearance (t 1/2) and the concentration of catalase enzyme activity. **Conclusion:** we concluded that hot water and vitamin C as a preventive and a natural source of antioxidant and they have immunostimulatory activity against pathogens such as virus.

Key words: Hot water; vitamin C; phagocytic index (k); carbon clearance rate; corrected phagocytic index (α); reticuloendothelial system.