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Usage of magnetized water (MW) as a drinking water to enhance hemoglobin derivatives concentrations after usage of DMSA as a chelator of lead ions intoxication

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Water covers three-fourths of the earth surface and constitutes 60-70 wt% of the living world. Water properties are found to be very effected by magnetic and electric field. The aim of this work was to study to what extend magnetic treated water can enhance the hemoglobin derivatives concentrations where these concentrations are affected by environmental factors specially heavy metals poisoning as lead ions elevation. Experiment was conducted to sixty seven rats subdivided into four groups. Control group (G1), animals neither received lead ions nor magnetic treated water (MTW) as drinking water. Second group (G2) received MTW only. Third group (G3) received lead ions for 21 days. Fourth group (G4) received lead ions concomitant with chelation therapy of di-mercapto-succinic acid (DMSA) without MTW. Fifth group (G5) received lead ions concomitant with chelation therapy of di-mercapto-succinic acid (DMSA) with MTW. Hemoglobin auto-oxidation rate, blood intrinsic viscosity, hemoglobin electric conductivity and hemoglobin different derivatives concentrations were measured. Results revealed significant enhancement in all hemoglobin parameters in all groups especially those did not get exposed to heavy metals. In conclusion, it is safe to say that magnetic treated water play a role in enhancement of hemoglobin performance.

## **Biography**

Bassem M Raafat has completed his PhD from Cairo University and Postdoctoral studies from the National Research Center. He is the Vice-Dean of Applied Medical Science College, Taif University. He is the Head of E-Learning Unit. He is the Coordinator of the Genetic Engineering and Biotechnology division in NRC. He has published more than 38 papers in reputed journals and has been serving as an Editorial Board Member more than 15 international well ranked journals.

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