



ABSTRACT

The present study examined the effect of hydrogen-rich water to the blood glucose levels of alloxan-induced Type I Diabetes Mellitus in male albino rats. Rats with established T1DM were randomized into two groups. The experimental group took hydrogen-rich water and the control group took metformin of 150mg/kg. Fasting blood glucose and weight were measured after every week for four weeks. The second week of treatment showed a significant decrease of FBG to 271.67 mg/dL ($p = 0.0006$). Compared with the results of metformin, hydrogen-rich water exhibited better lowering effects on the FBG levels of type I DM-induced albino rats but the lowering effects only lasted for two weeks, showing that both hydrogen-rich water and metformin can only maintain their lowering effects on T1DM-induced albino rats for a short term.