Supplementary Material-1

Influence of insulin on body weight and blood glucose of DNP rats

The Bonferronis post hoc test determined significant lose in body weight of STZ treated rats compared to control rats ($p<0.0001$). Following, insulin administration starting from week-5 reduced the decrease in body weights in DNP rats, followed by an observed increase in body weight. A two-way ANOVA was conducted to analyze the body weights of the animals treated with insulin and control rats, yielding following results; [treatment $F(1,276) = 262.6$, $p<0.0001$, time $F(4,276) = 50.83$, $p<0.0001$, interaction $F(4,276) = 17.28$, $p<0.0001$], **(**Fig.S 1 a**),** Additionally, a statistically significant increase in blood glucose levels was recorded in the diabetic rats after STZ injection, observed in week-2, with this trend continuing until week-5, as demonstrated by Bonferroni multiple comparison test ($p<0.0001$) in comparison to the control group. DNP rats receiving insulin 2 IU/kg from week-5 to week-11, showed normalization of the blood glucose levels compared to normal control group. This was confirmed by a two-way ANOVA followed by Bonferronni's multiple comparison test, which showed treatment $F(1,172) = 26.26$, $p<0.0001$, time $F(2,172) = 12.48$, $p<0.0001$, interaction $F(2, 172) = 13.23$, $p<0.0001$ (Fig.S 1 b).

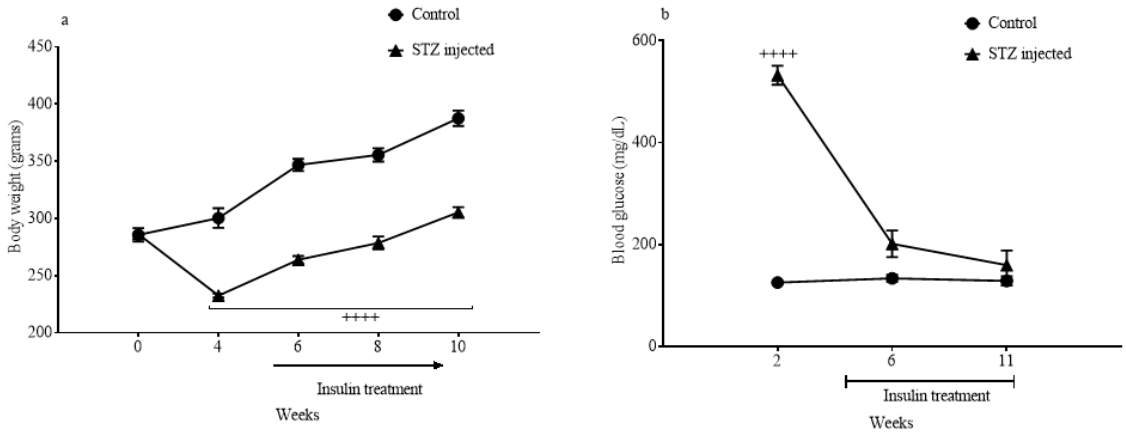

Figure S1. Effect of insulin on DNP rats. (a) Body weight was represented as Mean ± S.E.M, (n=9-45). (b) Blood glucose was represented as Mean ± S.E.M, (n=9-45), ++++$p<0.0001$, vs. Control rats, two-way ANOVA followed by Bonferroni's multiple comparison test**.**