



Effect of High Performance Inulin (Fructo oligosacharride) on Glycemic Control in Alloxan Induced Diabetic Rats

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ABSTRACT : The purpose of this study was to carried out to investigate the effect of inulin extracted from Jerusalem artichoke(*Helianthus tuberosis*)on decrease the blood glucose in alloxan induced diabetic rats. The oral administration of inulin decreased blood glucose , implying the utility of inulin as a bioactive material to prevent metabolic diseases oh humans. In the experiment, a total of 60 white rats were completely randomly allocated into 10 groups and six rats were used in each group (54 diabetic rats and six normal rats) were used. Diabetes was induced three days before starting the experiment. Concerning growth performance, in comparison with the control group, daily weight gain in the inulin administrated rats increased and recovered to the normal level. The average weight gain in treated group ranged from 19 g (T_1) to 36g (T_2)I after 28 days of study period. Blood glucose was significantly lowered in the inulin administrated group from 204.16 ± 3.57 to 121.16 ± 3.4 mg/dL (a reduction of 40.65%) at the end of four weeks feeding trials.

How to cite this paper : Jothilakshmi, K., Premalatha, M.R., Gurumeenakshi, G. and Shree, G.G. Kavitha (2016). Effect of High Performance Inulin (Fructo oligosacharride) on Glycemic Control in Alloxan Induced Diabetic Rats. *Internat. J. Med. Sci.*, 9(2) : 74-80, DOI : 10.15740/HAS/IJMS/9.2/74-80.

KEY WORDS :

Inulin, Glycemic index, Diabetic rats

Paper History :

Received: 18.04.2016;
Revised : 08.09.2016;
Accepted: 20.09.2016