ANTI-DIABETIC EFFECT OF APPLE VINEGAR IN ALLOXAN-INDUCED DIABETIC RATS

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ABSTRACT

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Apple vinegar has widely been used as antidiabetic effect due to the ability to reduce the blood glucose level. The objective of this work is to evaluate the effect dietary of apple vinegar in body weight and blood glucose level in alloxan-induced diabetic rats. 5 Wistar male rats were divided into 5 different groups which are distilled water, 0.16 ml apple vinegar, 0.18 ml apple vinegar, 0.2 ml apple vinegar and metformin. All the treatment were delivered through oral gavage every day before meal time. The daily food and drink uptake in all groups are controlled and fixed. The blood glucose level and body weight were measured once in 3 days for 15 days. In apple vinegar treatment groups, the consumption caused decreased of blood glucose level and body weight. There is significant difference in blood glucose level but not for body weight. Meanwhile, in distilled water group there is only slight decreased of blood glucose level and body weight. Metformin decreased both blood glucose level and body weight. However, there is some fluctuation in blood glucose level and body weight that might be caused by the amount of food and water uptake. It is concluded that apple vinegar can reduce blood glucose level and body weight in alloxan-induced rats.

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