


**EFFECTIVITY OF DIETARY SUPPLEMENT-DAIBETROL
ON ALBINO MICE (*Mus musculus*) IN LOWERING BLOOD GLUCOSE
LEVEL AND ITS EFFECT ON THE LIVER FUNCTION TEST**



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ABSTRACT

This study determines the effectivity of dietary supplement Diabetrol on albino mice *Mus musculus* (ICR strain) with a modified diet in lowering blood glucose level and its effect on liver function test. The test organisms were given caramelized pellets to induce hyperglycemia from a modified diet, T0 no supplementation, T1 once a day supplementation, T2 twice a day supplementation and T3 with thrice a day supplementation. Diabetrol was administered in twice a day morning and afternoon. Blood extraction by tail piercing was done to collect blood to determine blood glucose level using the prepared glucometer kit in mg/dl of blood. Pre-treated mean normal blood glucose level recorded were T0=78.25mg/dl and were increased after giving caramelized pellets to mean T1=89.5mg/dl, T2=85.75mg/dl and were T3=113.25mg/dl among treatments. Preliminary and Post-treatment of Diabetrol were statistically compared by one way anova which significantly ($0.4342 < 0.5$) lowered the mean blood glucose level from T1=82.5mg/dl, T2=85.75mg/dl and T3=113.25mg/dl. Independent t-test revealed that treatment 2 is the effective ($0.2723 \leq 0.5$) level of Diabetrol associated to mean blood glucose level 85.75mg/dl in this treatment. Final extraction has been done through cardiac puncture for the collection of blood that has been used for ALT and AST test. Serum AST and ALT showed no significant difference ($p > 0.5$) in the liver function test in all treatments indicating that Diabetrol has no direct effect on the liver function activity.

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