

Paper 139 – Sciences

**MORINGA LEAF (MORINGA OLEIFERA) ATTENUATES POSTPRANDIAL HYPERGLYCEMIA
IN NORMOGYCEMIC SUBJECTS WHEN TAKEN SIMULTANEOUSLY WITH GLUCOSE**

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ABSTRACT

Hyperglycemia due to impaired carbohydrate metabolism characterizes diabetes. This pathological condition has risen to be a global problem. Local folklore indicates that moringa (*Moringa oleifera*) is believed to be effective in controlling blood glucose for the diabetics and this study aimed to investigate if its efficacy is comparable to normoglycemic individuals also.

Study participants consisted of 30 normoglycemic healthy male adults randomly selected and required to sign informed consent. There were three groups of treatment, each done after overnight (8-10 hrs) of fasting. For the negative and positive controls, the subjects were given 6 g moringa leaf powder and 75 g of glucose, respectively. For the experimental treatment the subjects were given 6 g moringa leaf powder and 75 g of glucose simultaneously. Blood glucose were measured at 30, 60, 90 and 120 minutes after the ingestion.

The result of the study shows that Moringa leaf powder (6 g) significantly attenuated postprandial hyperglycemia only at 30 minutes ($p < 0.05$) after the consumption of the glucose combined with the moringa leaf and did not have significant acute effect on fasting blood glucose for the 60, 90, 120 minute postprandial time points. Thus, it is concluded, that moringa leaf powder significantly attenuates hyperglycemia at 30 minute postprandial time when taken simultaneously with glucose.