

Acute Administration of Aqueous Extract of *Garcinia Kola* Seed on Daily Blood Glucose Level and Selected Biochemical Indices of Liver Function in Albino Rats

Chinedu Imo

Faculty of Pure and Applied Sciences, Federal University Wukari

Received: July 12, 2022, Editor Assigned: July 15, 2022, Reviewed: July 22, 2022, QC No. COS- AA0001;

Published: June 20, 2022, Invoice No. OLP-00F1

Abstract

This study evaluated the effects of acute administration of aqueous extract of *Garcinia kola* seed on daily blood glucose level and selected biochemical indices in wistar albino rats in connection with human health. The serum liver enzymes activities of ALT and ALP increased significantly ($p < 0.05$) in the test animals (in groups two and three), while AST also increased, though not significantly ($p > 0.05$). ALT increased from 35.38 ± 1.35 U/L in control group (group one) to 47.25 ± 1.71 U/L in group three, while AST and ALP increased from 36.75 ± 2.50 U/L to 38.25 ± 4.79 U/L and 27.46 ± 4.57 U/L to 40.14 ± 7.26 U/L respectively. Blood glucose level decreased on daily basis after administration of aqueous extract of *Garcinia kola* seed. The results showed that daily consumption of *Garcinia kola* seed induced hypoglycaemic effect and hepatic toxicity in Wistar albino rats as observed in groups two and three. This invariably implies that this *Garcinia kola* seed may be used in the management of hyperglycaemia. Also, it should not be consumed regularly on daily basis.

Keywords: Blood glucose, *Garcinia kola*, liver enzymes and life expectancy.

Biography

Chinedu Imo was born on 26 June 1983 in Orlu, Imo, Nigeria. He is a Nigerian Musical Artist, Gospel singer, and Author. He has collaborated with a number of labels, including Favour Music Nig. Chinedu has worked on a variety of projects during his career.