



**EFFECT OF *SOLANUM LYCOPERSICUM* FRUIT EXTRACT ON CANCEROUS
CELLS OF ALBINO WISTAR RATS****NWAICHI EO^{1,a*} AND OMEMBU E^{2,b}**¹Department of Biochemistry, Faculty of Science, University of PortHarcourt, Nigeria²Department of Biochemistry, Faculty of Science, University of PortHarcourt, Nigeria[a nodullm@yahoo.com](mailto:nodullm@yahoo.com), [b omembu@gmail.com](mailto:omembu@gmail.com)

Received 15th July 2016; Revised 25th August 2016; Accepted 26th Sept. 2016; Available online 14th October. 2016

ABSTRACT

This study evaluated the preventive and ameliorative measures for cancer using simple dietary material (tomato). For this 26 d study, healthy control animals represented first group, receiving only standard feed and deionized water. Group two were given lead nitrate at 100mg/kg BW concurrently with tomato extract at 300mg/kg BW. Group three were given only lead nitrate and normal feed and water. Representatives from 2 and 3 were sacrificed and analysed at the end of 7d. Remaining group 3 animals were divided, some treated with 300mgkg⁻¹ BW tomato extract, some with 20mgkg⁻¹ BW of a known anticancer drug and some were untreated for 7d. Obtained results showed that ingestion of poison caused significant damage on the organs - liver and kidney and resulted in a significant increase in body mean weight change of 80g (female) and 20g (Male). Increased organs weight was thought to be due to the necrosis and apoptosis which could be attributed to the accumulation of the lipids in the two organs. Results also showed that female organs were affected more than those of the male. Treatment with extract significantly reduced the damage caused by the protoplasmic poison lead. The study concludes that supplementation with tomato paste gave protection against lead poisoning. Comparing the results of the preventive and ameliorative studies, the effect of the poison was best remedied when individuals fed daily on tomato paste or sauce rather than post – effect treatment. Post prandial use of tomato paste or sauce can reduce strong cell deteriorations (preventive).

Keywords: Lead nitrate poison; kidney; liver; Cancerous cells; Tomatoes paste.