INCIDENCE OF TYLOSIN RESIDUE IN BEEF CONSUMED IN DOKOLO DISTRICT.

BY:

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A RESEARCH DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND ANIMAL SCIENCES FOR THE AWARD OF A BACHELORS DEGREE OF ANIMAL PRODUCTION AND MANAGEMENT OF BUSITEMA UNIVERSITY.

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ABSTRACT.

Themain objective of the study was to assess the concentration of tylosin residue in beef consumed in Dokolo districtlocated in the Nothern part of Uganda.The study employed a quantitative approach where laboratory method was usedand the concentration of tylosin was determinedusing HPLC machine.A total of30 fresh beef (muscle) samples were purposively collected from the abattoir, slaughter slabs, and butcheries foundin the district. The samples were taken to Wandegeya Analytical Laboratory for analysis. The concentrations were determined and then compaired with the MRL as per the FAO/WHO Limits (0.1 parts per million). Results showed that tylosin was detected in all the samples submitted and the mean concentration was found to be 0.413±0.37 ppm which was aboveWHO/FAO Limits. The one sample t- test conducted also showed that there is a significant difference between the actual mean and the hypothesized mean. This is because p- value (0.0001) is less than the level of significance (0.05). The highlevels of the drug residues could have beendue to itsheavy use

Or failure to follow manufacturer'sinstructions.In conclusion, the study has shown that the poisonous drug residues (Tylosin) was present in beef consumed in Dokolo district. This finding demonstrate that there is a possibility of public health risk on the general public who consume beef from this research area.Therefore, there is need toreduce the concentration to levels that are not of public health concern. This can be through practical strategies such as; continuous sensitization of the public about drug use specifically tylosin. Comprehensive assessment of drug residues in all livestock products should also be done, this is to generate data for guidingpolitcy makers.Other scientists can also research on the concentration of this drug in other organs apart from muscle and also in other animal species.

DECLARATION.

I Ayo Susan declare that this report contains my own work and has never been submitted to any institution for any assistance or award of academic credit or qualification.

NAME: AYO SUSAN.

REG NO: BU/UP/2018/2025.

Signature Date

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APPROVAL.

This report has been submitted with the approval of my Academic supervisor.

SUPERVISOR:

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DEDICATION.

I would like to dedicate this work to my beloved husband, Mr. Wacha Caleb Omara, our father pastor Jimmy Omara and all my relatives who worked together with me up to this far. May the Lord bless you all for the kindeness you showed me.

ACKNOWLEDGEMENT

In a special way, I would like to acknowledge the tireless support and contribution provided to me by my supervisor**, Dr. Gerald Zirintunda, Dr. Henry Matovu,** the research coordinator and **all my lecturers** in Animal Department during thisspecial research project, may the Almighty God bless all of you abundantly.

I would also like to extend my gratitude to the District Production Officer of Dokolo district, **Dr. Richard Enyang** for granting me permission to collect samplesfrom his area.

To my fellow students, am also greatful for the experiences we shared during the entire project period.

Lastly, I thank Busitema University for giving me the opportunity to pursue this program, long live and continue to pursue excellence.

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LIST OF ABBREVIATIONS

ADI	Aceptible Daily Intake
Bw	Body weight
EU	European Union
FAO	Food and Agriculture Organization
HPLC	High Perfomnce Liquid Chromatography
ILCR	Institute of Legal and Constitutional Research
Kg	Kilogram
MAAIF	Ministry of Agriculture, Animal Industries and Fisheries
Mg	Milligram
Mμ	Micrometer.
MRL	Maximum Residue Limit
RNA	RiboNucleic Acid
TAL	Tolerable Intake Levels
UBOS	Uganda Bureau Of Statistics
Vd	Volume of Distribution
WHO	World Health Organization
DVO	District Veterinary Officer.
PPM	Parts Per Million.