RESIDUES OF TETRACYCLINE ANTIBIOTIC IN CATTLE MEAT MARKETED IN OGUN AND LAGOS STATES OF NIGERIA

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ABSTRACT

Antibiotics are usually used for prevention of diseases in food animals, if passed into human food chain they could constitute potential health hazards to the consumers. This study investigated the tetracycline residue levels of meat of cattle sold for human consumption in Ogun and Lagos States. Meat samples (180) were collected from liver, kidney and muscle tissues of cattle from two open markets in each of 15 Local Government Areas of Ogun and Lagos States. The samples were analyzed using microbiological assay technique (agar diffusion method). Residues of tetracycline were detected with *Bacillus subtilis* (ATCC 6633) on antibiotic medium 2 agar (Difco ®). The study revealed that 16.63%, 15.0% and 13.34% of the liver, kidney and muscle samples residues in these organs was between 0.01µg/g and 0.50µg/g. Some of the muscle samples had residue values higher than the recommended tolerance level. In view of the health hazard of drug resistance in exposed individuals, it was advocated that the use of antibiotics in food animals be done with great care, enlightenment programs should be carried out at both State and Local Government levels on the ills of injudicious use of antibiotics.

Keywords: Residues, tetracycline, meat, cattle, Ogun, Lagos.