

Residue depletion of oxytetracycline (OTC) and 4-epi-oxytetracycline (4-epi-OTC) in broiler chicken's claws by liquid chromatography-tandem mass spectrometry (LC-MS/MS)

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© 2016 Informa UK Limited, trading as Taylor & Francis Group. Antibiotics are widely used in poultry production for the treatment of bacterial diseases. However, residues may remain in products and by-products destined for human consumption or animal feeding. The claws of chickens, which are a by-product of the poultry industry, can directly or indirectly enter the food chain as meals destined to feed other productive animals. Thus, it becomes necessary to determine and quantify antimicrobial residues present in this matrix. The objective of the study was to assess the depletion of oxytetracycline (OTC) and its metabolite 4-epi-OTC in broiler chicken's claws. Claws of 32 broilers treated with a therapeutic dosage of 10% OTC during 7 days were analysed. Samples were taken at days 3, 9, 15 and 19 post-treatment. As for the control group, eight broiler chickens were raised under the same conditions. Extraction was carried out through EDTA-McIlvaine buffer, and clean-up employed a SPE C-18