Residue depletion of florfenicol and florfenicol amine in broiler chicken claws and a comparison of their concentrations in edible tissues using LC?MS/MS

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 Antimicrobial residues might persist in products and by-products destined for human or animal consumption. Studies exploring the depletion behavior of florfenicol residues in broiler chicken claws are scarce, even though claws can enter the food chain directly or indirectly. Hence, this study intended to assess the concentrations of florfenicol (FF) and florfenicol amine (FFA)?its active metabolite?in chicken claws from birds that were treated with a therapeutic dose of florfenicol. Furthermore, concentrations of these analytes in this matrix were compared with their concentrations in edible tissues at each sampling point. A group of 70 broiler chickens were raised under controlled conditions and used to assess residue depletion. Sampling points were on days 5, 10, 20, 25, 30, 35, and 40 after ceasing treatment, thus extending beyond the withdrawal period established for muscle tissue (30 days). Analytes were extracted using HPLC-grade water and acetone, and dich