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Detection and quantification of antibiotics residues in chicken meat by reversed-phase high-performance liquid chromatography

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The purpose of this study is to analyze the effect of tetracycline and oxytetracycline antibiotics in chicken meat samples by High Performance Liquid Chromatography (HPLC) method. In addition, we will learn whether the antibiotic level is low according to MRL (maximum residue level) or not. In this study, penicillin G, tetracycline, oxytetracycline are chosen for their common objectionable usage in animals and for the difficulties in the procedure of analysis. We can find whether chickens were cut on time or not. The method involves the extraction of OTC from chicken meat and the determination by HPLC. Chicken meat which was purchased from different brand was analyzed by HPLC. We found different results according to chicken meat. We also found antibiotic residue in chicken which is fed in village. 37.6µg of oxytetracycline residue was found in organic chicken. Normally tetracycline (TC) and oxytetracycline (OTC) levels in chicken breast won't be above 100µg per kg.

Biography

Birsen Demirata Ozturk has obtained her PhD in 1986 and became Associate Professor in 1992 and full Professor in 2000 in the branch of Analytical Chemistry. Her research interest is in basic concepts of environmental and analytical chemistry and development of analytical methods for the spectrophotometric determination.

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