

## Residues of $\beta$ -lactams and quinolones in tissues and milk samples. Confirmatory analysis by liquid chromatography–mass spectrometry

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**Abstract** The aim of this work is to optimize and validate methods for the multiresidue determination of series of families of antibiotics as quinolones, penicillins and cephalosporins included in European regulation in food samples using LC-MS/MS. Different extraction techniques and clean-up applied to antibiotics in meat were compared. The quality parameters were established according with EU guideline. The developed method was applied to 49 positive raw milk samples from animals medicated with different antibiotics; 63% of the analyzed samples were found to be compliant and adequate for human consumption.

**Keywords:** quinolones, penicillins, cephalosporins, animal tissues, milk, LC-MS/MS.

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