P15

Multiresidue Method of Sulfonamides in Meat by HPLC

Jiyoon Jeong, Jungmi Kim, Moohyeog Im, Dongmi Choi,
Kunsang Park, Mooki Hong, Chulwon Lee,

Center of Food Safety Evaluation,
Korea Food & Drug Administration

A selective liquid chromatographic method has been improved to detect multiple sulfonamides residues in meat(beef, pork, chicken). The 11 sulfonamide(sulfadiazine, sulfathiazole, sulfamerazine, sulfamethazine, sulfamethoxypyridazine, sulfachloropyridazine, sulfa-monomethoxine, sulfamethoxazole, sulfisoxazole, sulfadimethoxine, sulfaquinoxaline) were extracted with acetonitrile and the organic phase evaporated. The residues were dissolved in methanol and the fat was removed by washing with hexane. The methanol layer was collected and evaporated. The residues were dissolved in methanol, filtered, and injected. The sulfonamides were detected at UV 270nm using a gradient system starting with 5mM KH_2PO_4(pH=3.25) : Methanol(100:0) and finishing with 5mM KH_2PO_4(pH=3.25) : Methanol(30:70). For 50ppb fortified sample, the average recoveries were 75~95%. Method detection limits were ranged from 4~16ppb.