Determination of organophosphorus pesticides in baby food

Simona DOBRINAS*, Alina SOCEANU, Gabriela STANCIU and Adriana CULEA

*Department of Chemistry, Ovidius University of Constanta, 124 Mamaia Blvd, 900527 Constanta, Romania

Abstract Measurements of organophosphorus pesticides residues were conducted on four different baby food puree based on vegetable, fruit, white fish and veal, products based on cereals and biscuits packed in cardboard box using gas chromatography with thermoionic specified detector (GC-TSD). The lowest concentration of organophosphorus compounds was found for sulfotep, 0.00006 mg/kg in biscuits, while the highest concentrations were found for diazinon and fenchlorphos, with values of 0.1096 mg/kg and 0.1903 mg/kg, both in the grain samples.

Keywords: organophosphorus pesticides, GC-ECD, baby food