

OVERVIEW OF SOME B GROUP CONTAMINANTS (ORGANICHLORINE PESTICIDES AND PCB'S, ORGANOPHOSPHORUS COMPOUNDS, HEAVY METALS AND RADIONUCLIDES) MONITORING DATA IN PRIMARY PRODUCTS OF ANIMAL ORIGIN IN LITHUANIA THROUGHOUT TEN (1999–2008) YEARS PERIOD

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Abstract. The goal of this work was to analyze contamination of Lithuanian primary products of animal origin with some of the persistent organic pollutants (POP's), heavy metals and radionuclides in the ten years period of monitoring. The influence of the year, the type of pollutant and the type of product on the number of tested and non-compliant samples (samples which exceeded the determined maximum residue limit) was analysed. The analyses showed a significant impact of all those factors on the number of tested and non-compliant samples. Before 2004, only residues of chloroorganic pesticides and PCB were tested in Lithuania. From 2004, organic compounds of phosphorus and dioxins were started to be monitored. In poultry, fish and wild game residues of chloroorganic pesticides were found which exceeded the permissible limits; most of them in game meat ($p \leq 0.05$). The remains of chloroorganic pesticides, DDT ($p \leq 0.05$) in particular, were most common among the non-compliant samples of POP's. Significant residues of dioxins were found only in fish. The number of non-compliant cadmium samples was higher than that of lead ($p \leq 0.001$). The specific activity of artificial radionuclides (^{137}Cs and ^{90}Sr) in animal food products was significantly lower than the permissible limit.

Keywords: monitoring, organichlorine pesticides and PCB's, organophosphorus compounds, heavy metals, radionuclides, foods of animal origin.