

REVIEW OF HEAVY METALS IN COW'S MILK

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Summary. Aim of research – to compare results of cadmium and lead level in cow's milk presented by Lithuanian and foreign scientists. Analyzes were carried out on fresh milk, delivered to five biggest Lithuanian milk factories. Milk was analyzed 5-7 times from 15-20 farms of each district. Concentrations of lead and cadmium were determined by poliarografic method. The average lead and cadmium content in milk from different farms was 0.01 mg/kg – 0.12 mg/kg and 0 – 0.02 mg/kg, respectively. The average lead levels in milk ranges from 0.017 mg/kg to 0.029 mg/kg (\pm 0.003) in five districts in 1991. Continuous air quality monitoring in the Vojvodina district of Serbia and Montenegro has shown high levels of Cd. 103 milk samples collected in Bogdanka coal mine and other industrial areas in East Central Poland were analyzed in 1998. The average lead and cadmium content was significantly higher in milk produced in the same place where the mine is located in comparison with other towns around the mine. 40 samples of cow's milk were analyzed in Calabria, Italy. The highest determined value was lead – 1.32 μ g/kg and the lowest cadmium 0.02 μ g/kg. MRLs were not exceeded in United Kingdom, Croatia region of Zagreb, East Slovakia.

Keywords: cow's milk, heavy metals, Pb, Cd.