

AMOUNT OF HEAVY METALS – LEAD, CADMIUM AND MERCURY – IN WILD GAME SAMPLES HUNTED FOR FOOD

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Summary. Wildlife (cervids) hunted for food – roe deer (*Capreolus capreolus*), deer (*Cervus elaphus*), reindeer (*Rangifer tarandus*), moose (*Alces alces*) and wild boar (*Suis scrofa*) are good bioindicators reflecting contamination of ecosystem by toxic chemical substances. Determination of toxic chemical substances, such heavy metals or pesticides in wildlife tissues and internal organs is important seeking to ensure that amount of toxic substances are not exceeding permissible level and are safe for consumption.

Investigation showed that average of the heavy metals in game meat (Pb Md=0,044 mg/kg; Cd Md=0,02 mg/kg; Hg<0,001 mg/kg) do not exceed maximum permissible level according Hygiene Norm HN 54-2001 (Pb DLK=0,1 mg/kg, Cd DLK=0,05 mg/kg). The highest concentration of heavy metals has been found in viscera of game (liver: Pb Md=0,062 mg/kg; Cd Md=0,257 mg/kg; Hg=0,001 mg/kg; kidney: Pb Md=0,11 mg/kg; Cd Md=0,714 mg/kg; Hg=0,045 mg/kg), but have not exceed maximum permissible level according Lithuanian Hygiene Norm HN 54-2001.

Even in few investigated samples level of the heavy metals exceed maximum allowed level but due to low and very seldom consumption of game meat and liver it does not endanger for consumer health.

Keywords: heavy metals, game meat, cervids, wild boar.