Serum levels of selected lipids of Thoroughbred foals during growth period

Summary
The aim of this study was to examine the triacylglycerols (TG), total cholesterol (ChC) and high density lipoproteins (HDL) serum concentration of Thoroughbred foals descending from two different sires, to follow up changes in blood lipid profile during their growth period and to estimate possible differences in the examined lipid components of blood between compared groups of foals. Material for this work was collected in K Stud from 20 Thoroughbred foals descending from two different sires - stallion I (8 foals) and stallion II (12 foals). Blood was collected monthly, starting from the second to thirteenth month of life. Serum concentrations of TG, ChC and HDL during observed period of growth were within normal limits testifying of the proper physiological processes and health of developing young horses. The concentration of examined indicators of lipid metabolism was the highest at the first month of foal life as a result of stabilizing physiological processes. The next increase in the level of examined lipids was observed in sixth month of life and was connected with the change of feeding system at weaning foals from their mothers. Sire of foals was found to influence their TG serum concentration. Parentage affected also the level of ChC in blood of foals. However, serum concentration of HDL did not differ between compared groups of foals and showed similar changes during the whole period of observation.