AGE AND FEED EFFECT ON THE DYNAMICS OF ANIMAL BLOOD BIOCHEMICAL VALUES IN POSTNATAL ONTOGENESIS IN CALVES

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Abstract. This study is part of a complex investigation when at the same time morphofunctional condition of the liver and intragastric pH dynamics in different parts of the stomach are investigated in animal postnatal ontogenesis in association with its feeding. The aim of this study was to determine if the blood biochemical indices change and what are their changes in calves since the birth until calves become ruminants, fed with whole milk or milk replacer, as well as in older calves, fed only with forage and concentrated mixed feed. In order to find it out, the nine animal groups with different age and feeding were formed. The total number of examined animals was 32. Blood was sampled at 6 a.m. Before feeding glucose, urea, creatinin, total bilirubin, albumin, ALAT, ASAT, a-amylase, Ca, P, alkaline phosphatase were determined in the blood serum. The dynamics of the blood biochemical indices in calves during the first week after the birth showed a more or less cytolytic syndrome in the liver parenchyma. Some blood biochemical indices in older animals differed depending on the feed.

Keywords: urea, kreatinine, total bilirubin, albumin, ALAT, ASAT, alkaline phosphatase, whole milk, milk replacer, postnatal ontogenesis, calf.