

## The influence of colostrum consumption on serum lactoferrin in newborn calves

Ioana MINEA (căș. PIPIRIG)\*, Elena VELESCU, Cristina HORHOGEA

Faculty of Veterinary Medicine from Iasi, Aleea Mihail Sadoveanu nr. 8, 700489, Iași, România

\*corresponding author: e-mail: yoana.minea@gmail.com

### **Abstract**

*Lactoferrin is a glycoprotein from the transferrin family, proteins capable of binding and transferring Fe<sup>3+</sup> ions. Lactoferrin from bovine colostrum and milk has become increasingly important due to its wide range of biological properties. Colostrum intake leads to increased serum lactoferrin levels in calves [11], foals [2] and piglets [5]. Together with IgG, it is transferred from the intestinal tract into the systemic circulation through passive absorption in the case of newborns. Fewer studies have been performed in animals, but it has been shown to reduce morbidity and improve the growth rate of calves [9]. Studies have also indicated that lactoferrin can lead to the elimination of pathogens and therefore to the reduction of the incidence of neonatal diseases through the mechanism of iron binding, inhibition of bacterial growth and proteolytic activity [1].*

**Key words:** calf, colostrum, lactoferrin, passive transfer.