World Academy of Science, Engineering and Technology
International Journal of Biomedical and Biological Engineering
Vol:10, No:04, 2016

Immunoglobulins and Importance in Ruminants

Authors : M. Akoz, O. B. Citil, I. Aydin

Abstract : Colostrum secreted by the mammary glands after birth in the early days, a high proportion of fat, protein and ash containing a secretion containing low amounts of casein and lactose. Especially immunoglobulins contain high proportions. Maternal immunoglobulins own immune system to protect the newborn against neonatal disease until development are very important matter. However, colostrum is transferred to the offspring due to placental barrier in ruminants. Immunoglobulins are absorbed through the intestinal epithelium but absorption can vary under the influence of some factors. These factors are among the priority ones taking colostrum first time, amount, concentration, the metabolic status of the newborn. intestinal absorption of immunoglobulins occurs over the first 24 h high. Absorption from the gut after nine hours, 50% after 24 hours was only 11%. On the other hand pup's digestive system degrade the enzymes after 24 hours immunoglobulins. Bovine colostrum in the composition while basic immune IgG, IgA and IgM are also available. Total IgG in colostrum of ruminants, while in other species is a greater amount in blood serum.

Keywords : immunoglobulin, ruminants, colostrum, immune system
Conference Title : ICVBS 2016 : International Conference on Veterinary and Biomedical Sciences
Conference Location : Paris, France
Conference Dates : April 25-26, 2016