

# ColoZen™

## THE IMPORTANCE OF COLOSTRUM TO NEW-BORN ANIMALS

New-born animals are born immunologically naive and therefore depend on passive immunity (antibodies) from the mothers' colostrum to prevent disease. The role of the mothers' colostrum and milk is to provide nutrition, immunological protection (antibodies), promote gut development (growth factors) and protect the intestinal mucosa (Vitamin A). The quality and quantity of the mothers' colostrum depends on her age, nutritional status and overall condition. A number of new-born animals, particularly those in multiple births, receive inadequate supplies of colostrum from their mother.

Orphan animals receive no colostrum. These animals are vulnerable to infectious diseases, have restricted growth rates and are susceptible to scouring. Colostrum and colostrum supplements increase the concentration of serum immunoglobulins, protect the intestinal mucosa from pathogens and activate the immune system. The figure below shows the amount of antibodies found in new-born animals' blood over the first 9 weeks of life. For the first four weeks the neonate is completely dependent on the antibodies it receives from the mother for its protection against foreign pathogens. The new-born animal begins the production of its own antibodies 3 to 4 weeks after birth. Neonates are most susceptible to infection between 3 and 6 weeks after birth when the blood antibody concentration is lowest. Clearly the more colostrum antibodies that a new-born animal receives the greater the protection it will have against infectious diseases. Colostrum supplements play a key role in today's animal husbandry practice.

