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Some Factors Influencing the Physiological Level of Milk Somatic Cell Count in Lactating Camels

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Abstract

Camels are very important animals as they can produce milk in arid climates. In order to maintain healthy camel milk for consumers, we need to regularly check the camel and ensure hygiene measures in all camel farm systems. The somatic cell count (SCC) is a very good parameter for indicating milk hygiene, milk quality and udder health in dairy camels. In particular, the SCC is the most accurate, reliable diagnostic method for detecting subclinical mastitis in milk camels under field conditions. The present study sheds light on Some factors influencing the physiological level of somatic cell count of milk in camels.The somatic cells in camel milk contain the following cells: macrophages, polymorphonuclear neutrophils (PMN), lymphocytes, and a large number of cell fragments. Lymphocytes are the predominant cell type in camel milk in the healthy udder. So far there is no established physiological level for SCC in healthy camel milk. We suggest that 150×10^3 SCC cells/ml in milk is a limit value for healthy camel milk. If the SCC exceeds this limit, subclinical or clinical mastitis of the udder may occur and the milk may be contaminated with microbes. In order to maintain camel milk hygiene, proper machine milking such as StimuLactor for camels must mainly be used in the intensive housing systems. An increase in the SCC above the physiological level not only indicates a problem with the health of the udder, but also reduces milk production, changes the milk composition, affects milk processing and changes the bioactive ingredients of camel milk.

Keywords: Camel, mastitis, milk quality, physiology, somatic cell count, stimuLactor

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