

PHYSIOLOGICAL PERSPECTIVE OF MILK SOMATIC CELL COUNT IN LACTATING CAMELS

Kaskous S¹, Ahmad Q Al-Momani², Azzam N Al-Yacoub³ and Khaled A Al-Najjar²

¹Department of Research and Development, Siliconform, Schelmengriesstrasse 1, 86842 Türkheim, Germany

²Animal production and Protection Department, Faculty of Agriculture, Jerash University, Jordan

³Biology Department, Faculty of Applied Science, Umm Al-Qura University, Makkah, Saudi Arabia

ABSTRACT

The present study sheds light on some physiological aspects of milk SCC in lactating 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. It is suggested 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 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.

Key words: Camel, camel milk, somatic cell count, StimuLactor