





The information on the influence of bulk milk composition of late lactation goats can help cheesemakers to better understand the effect on milk suitability for cheesemaking and cheese quality.

It is known that sheep and goat milk normally have higher SCC than cows milk. SCC has been used as an indicator to detect mastitis in cows and it should be adapted for goat milk, too (Stuhr et al., 2013). Milk with a low SCC and bacterial count is the base for having healthy animals and good hygienic practice at the farm (Skeie, 2014). Goat breeders should remember that SCC is also an indicator of goat subclinical mastitis (Bagnicka et al., 2011). To establish the acceptable limits for SCC in goat milk, it is necessary to evaluate the average value as its variation through lactation.

### Conclusions

The stage of lactation influences lactose, protein, fat content and SCC count in goat milk.

The analysed goat milk varied considerably in composition, especially in the late lactation. Milking crosses had shown the higher milk yield and lower SCC in the late lactation milk.

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### References

1. Agricultural Data Centre Republic of Latvia. [accessed on 05.02.2019.]. Available at: <http://ldc.gov.lv/lv/statistika/parraudziba/>
2. Bagnicka E., Winnicka A., Jóźwik A., Rzewuska M., Strzałkowska N., Kościuczuk E., Prusak B., Kaba J., Horbańczuk J., Krzyżewski J. (2011) Relationship between somatic cell count and bacterial pathogens in goat milk. *Small Ruminant Research*, Vol. 100, p. 72–77.
3. García V., Rovira S., Boutoil K., López M.B. (2014) Improvement in goat milk quality: A review. *Small Ruminant Research*, Vol. 121, p. 51–57.
4. Goetsch A.L., Zeng S.S., Gipson T.A. (2011) Factors affecting goat milk production and quality. *Small Ruminant Research*, Vol. 101, p. 55–63.
5. Chávez-Servín J.L., Andrade-Montemayor H.M., Velázquez Vázquez C., Barreyro A.A., García-Gasca T., Ferríz Martínez R. A., Andrea M., Ramírez O., de la Torre-Carbot K. (2018) Effects of feeding system, heat treatment and season on phenolic compounds and antioxidant capacity in goat milk, whey and cheese. *Small Ruminant Research*, Vol. 160, p. 54–58.
6. Leitner G., Lavon Y., Matzrafi Z., Benun O., Bezman D., Merin U. (2016) Somatic cell counts, chemical composition and coagulation properties of goat and sheep bulk tank milk. *International Dairy Journal*, Vol. 58, p. 9–13.
7. Park Y. W. (2009) Bioactive components in goat milk. **In:** *Bioactive Components in Milk and Dairy Products*. Vol.1. 3<sup>rd</sup> ed. Park. Y.W. Wiley Blackwell, p.43–81.
8. Piliena K., Jonkus D. (2012) Factors affecting goat milk yield and its composition in Latvia. *Research for Rural Development 2012: annual 18<sup>th</sup> international scientific conference proceedings*, p. 79–84.
9. Skeie S.B. (2014) Quality aspects of goat milk for cheese production in Norway: A review. *Small Ruminant Research*, Vol. 122, p. 10–17.
10. Steinshamn H., Inglingstad R.A., Ekeberg D., Mølmann J., Jørgensen M. (2014) Effect of forage type and season on Norwegian dairy goat milk production and quality. *Small Ruminant Research*, Vol. 122, p. 18–30.
11. Stuhr T., Aulrich K., Barth K., Knappstein K., Larsen T. (2013) Influence of udder infection status on milk enzyme activities and somatic cell count throughout early lactation in goats. *Small Ruminant Research*, Vol. 111, p. 130–146.
12. Tatar V., Mootse H., Sats A., Mahla T., Kaart T., Poikalainen V. (2015) Evaluation of size distribution of fat globules and fat and protein content Estonian goat milk. *Agronomy Research*, Vol. 13 (4), p. 1112–1119.
13. Verruck S., Dantas A., Prudencio E.S. (2019) Functionality of the components from goat's milk, recent advances for functional dairy products development and its implications for human health. *Journal of Functional Foods*, Vol. 52, p. 243–257.