

## **Comparison of physicochemical properties of milk from cows fed the TMR system in the selected farms of West Pomeranian region**

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### **Summary**

This study aimed to compare, over the period of a year, physicochemical properties of bulk milk obtained from TMR fed cows in three large-scale farms in the West Pomeranian region, Poland. Parameters determined in the examined milk were fat, total protein, casein, dry matter, solids-not-fat, density and titratable acidity. Moreover, the additional tests were conducted to estimate the milk's alcohol stability (single and double ethanol test) and approximately, the somatic cell count (Whiteside test). The milk was also subjected to sensory evaluation. This study has revealed that in all samples of the examined milk, density and total protein were in conformity with the regulation of the Polish Ministry of Agriculture and Rural Development of August 18<sup>th</sup>, 2004, while milk acidity conformed to the Polish Standard PN-A-86002. Moreover, both the place and time of milk collection were found to significantly affect the content of fat, dry matter and solids-not-fat. The milk collected from all three farms had proper sensory characteristics and alcohol stability.

**KEY WORDS:** milk composition / TMR feeding / acidity / alcohol stability