



SPSS for veterinary epidemiology

EXERCISES

María J. Vilar
Dep. of Food Hygiene and Environmental Health

31. 05. 2013

This exercise was based on the article “Application of ATP bioluminescence for evaluation of surface cleanliness of milking equipment”

International Journal of Food Microbiology 125 (2008) 357–361



Contents lists available at [ScienceDirect](#)

International Journal of Food Microbiology

journal homepage: www.elsevier.com/locate/ijfoodmicro



Short communication

Application of ATP bioluminescence for evaluation of surface cleanliness of milking equipment

M.J. Vilar ^{*}, J.L. Rodríguez-Otero, F.J. Diéguez, M.L. Sanjuán, E. Yus

Instituto de Investigación y Análisis Alimentarios, Facultad de Veterinaria, Universidad de Santiago de Compostela, Campus Universitario s/n. 27002, Lugo, Spain

Information: A study was carried out in 106 dairy cattle farms.

Data: use of chlorinated water, frequency of using acid detergent, and the type of milking system. Measures of relative luminescence units (LRU) are provided for teat cup rubbers, teat dip containers, milk receivers, and pipeline joints. Information about bacterial count in bulk tank milk is also provided and should be categorized in 3 classes: A ($<20 \times 10^3$ cfu/ml), B ($20-100 \times 10^3$ cfu/ml), and C ($>100 \times 10^3$ cfu/ml) according to a quality system.

The objectives are:

- i) to investigate if LRU values on various types of milking equipment surface are influenced by the milking system and cleaning system practices;
- ii) to evaluate the relationship between LRU data and bulk-tank milk bacterial count.

This exercise was based on the article “Drying-off practices and use of dry cow therapy in Finnish dairy herds”



J. Dairy Sci. 101:7487–7493
<https://doi.org/10.3168/jds.2018-14742>
© American Dairy Science Association®, 2018.

Short communication: Drying-off practices and use of dry cow therapy in Finnish dairy herds

M. J. Vilar,¹ M. Hovinen, H. Simojoki, and P. J. Rajala-Schultz

Department of Production Animal Medicine, Faculty of Veterinary Medicine, University of Helsinki, Saarentaus 04920 Finland

Information: A survey was carried out in 250 dairy cattle farms.

Data: type of milking system, herd size (mean number of cows), rolling herd milk production, bulk tank milk SCC, type of antibiotic dry cow therapy (DCT) used in the farms.

The objectives are:

- i) to explore associations between use of DCT and bulk tank milk SCC (cells/mL),
- ii) to evaluate relationship between the use of DCT and rolling herd milk production.