VPH-OP-02

TITLE

WELFARE ASSESSMENT OF FATTENING PIGS USING ROUTINELY COLLECTED AND EDITED PRODUCTION DATA

<u>Julia Grosse-Kleimann</u>¹, Birte Wegner², Ines Spiekermeier³, Elisabeth grosse Beilage⁴, Michaela Fels², Hendrik Nienhoff³, Henning Meyer⁵, Heiko Plate⁵, Hubert Gerhardy⁶, Lothar Kreienbrock¹

- ¹ Department of Biometry, Epidemiology and Information Processing, University of Veterinary Medicine Hannover, Germany
- ² Institute for Animal Hygiene, Animal Welfare and Farm Animal Behaviour, University of Veterinary Medicine Hannover, Germany
- ³ Swine Health Service, Chamber of Agriculture Lower Saxony, Oldenburg, Germany
- ⁴ Field Station for Epidemiology, University of Veterinary Medicine Hannover, Germany
- ⁵ VzF GmbH, Uelzen, Germany
- ⁶ Marketing Service Gerhardy, Garbsen, Germany

CONTENT

Background/Objectives

In recent years farm animal welfare has sufficiently attracted political and social attention. However, in Germany, there is no governmental pig welfare monitoring. One reason for this is that the assessment by farm visits needs many personnel and economic resources. Hence, the aim of this study is to investigate the usability of routinely collected production data as welfare indicators.

Material/Methods

The MulTiViS project examines recent consolidated production data of 205 commercial fattening pig farms in the northeast of Lower Saxony (Germany). Facts about the usage of antibiotics, findings at the abattoir, performance data and farm characteristics (feeding/housing/management) were gathered. Data was linked, aggregated and analyzed to identify association structures.

Results

After a plausibility check and analyses of association, 36 out of 70 variables were selected as usable for modelling welfare. The average number of antimicrobial treatments per pig space was 0.85 (34 of 205 farms did not use any antibiotics at all) and the prevalence of severe lung lesions was 0.04. The mean mortality was 2.23 per 100 per half year and 178 farms got their piglets from only one breeder.

Discussion/Conclusion

Animal welfare is a rather complex term and the assessment of data from the production process only may give a restricted picture of it. Still the interconnection of these data sources is unique in Germany and will be evaluated as a practical method for a national welfare monitoring. As next step, the status quo of the animal welfare in the study farms will be validated by a personal investigation performed by two study veterinarians who examine the pigs and their environment.

The project is supported by funds of the Federal Ministry of Food and Agriculture (BMEL) based on a decision of Parliament of Federal Republic of Germany via Federal Office for Agriculture and Food (BLE).