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Welfare assessment in veal calves fattened in ‘outdoor veal calf’ versus conventional operations

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The ‘outdoor veal calf’ system was developed to encounter the demand for a veal fattening system that allows for reducing antimicrobial use without impairing animal welfare. Management improvements including direct purchase, short transportation, vaccination, quarantine in individual hutches during three weeks, and open-air housing in small groups in a roofed, straw-bedded paddock with a group hutch were implemented in a prospective intervention study (1,905 calves, 19 intervention and 19 control farms, one year): antimicrobial use was five times lower in ‘outdoor veal’ farms compared to control farms ($P < 0.001$), but it was crucial to ensure that antimicrobial treatment reduction was not associated with decreased animal welfare, i.e. that sick animals were not left untreated. Welfare was assessed monthly on the farms and organs of 339 calves were examined after slaughter. Cough and nasal discharge were observed significantly ($P \leq 0.05$) less often in ‘outdoor veal calf’ than in control farms, mortality (3.1 vs 6.3%, $P = 0.020$) and lung lesion prevalence (26 vs 46%, $P < 0.001$) were lower; no group difference was seen in abomasal lesion prevalence (65 vs 72%). Thus, beside reduced antimicrobial use, calf health and welfare were improved in ‘outdoor veal calf’ farms in comparison to traditional operations.

A model for economic impact of animal welfare improvements at slaughter of cattle and pig

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Stress in animals prior to slaughter affects animal welfare as well as meat and carcass qualities, and may generate direct costs for the slaughterhouse business and the meat process industry due to reduced meat quality and condemnation of meat. Suboptimal design of slaughterhouse interior layouts and fittings acts to reduce animal welfare, but also leads to suboptimal workflow, impaired flow of animals through the slaughter process and thus reduced production efficiency for the slaughterhouse operator. In order to stay competitive, food business operators such as slaughterhouses need to optimise their economic returns. A literature review on the economic effects of animal welfare aspects at slaughter was performed, however only few studies previously published in this area were found. The overall aim of this study was to map the possible economic impact of improved animal welfare at slaughter at slaughterhouse business level. The specific aims were first, to develop an economic model, second, to map the impact of animal welfare improving practices based on scientific literature and third, to verify and adjust the economic model based on focus groups interviews. The results of our study can be used to support and improve the understanding of the economic aspects of animal welfare at slaughter and furthermore, enable informed decisions by policy makers.