

Application of the Welfare Quality® protocol to assess growing pigs kept under intensive conditions in Spain

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Abstract

This study is a first step toward the validation of the Welfare Quality® protocol for assessing welfare of growing pigs kept on farms. The feasibility and sensitivity of the entire protocol was evaluated on 30 conventional farms in Spain, and a methodology to identify farms with particular welfare problems was proposed. A total of 64,496 pigs were assessed on the basis of 12 criteria related to the following 4 welfare principles: good feeding, housing, health, and appropriate behavior. Good feeding, housing, and health measures were scored at the pen- or individual-level using a 3-point scale ranging from 0 (good welfare) to 2 (poor or unacceptable). Appropriate behavior was assessed by scan sampling of social and exploratory behavior, qualitative behavior assessment, and a human–animal relationship test. The mean time taken for performing the full protocol was 6 hours and 20 minutes $\pm$ 51 minutes per visit. The between-farm variability of moderate and severe bursitis, presence of manure on less than 50% of the body surface, expression of positive and negative social behaviors, and exploration helped in the assessment of discrimination among farms. However, other animal-based measures, especially the ones related to the good health principle, presented very little variation that could be used to differentiate among farms. For each animal-based measure, confidence limits were estimated so as to make statistical inferences at the population level. This methodology could be useful to identify farms with poor welfare conditions.

Keywords: [animal-based measures](#), [animal welfare](#), [farm](#), [growing pig](#), [welfare assessment system](#), [Welfare Quality®](#)

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