Aspects of on-farm data assessment on cattle welfare included in the development of a Danish Animal Welfare Index

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The Danish Animal Welfare Index (DAWIN) is partly constructed with data assessed on-farm and is intended to be a multi-criterial, aggregated scoring system. Its development started with evaluating the wide field of animal welfare parameters that can be found in the literature. Following this, the construction of the so-called ‘brutto-list’ was the first step to revise all available indicators, considering further only those aligning with the three important criteria: validity, reliability and feasibility. A further ‘survival factor’ that will shape the consecutive developed ‘netto-list’ is an ‘expert-round’, confirming and weighting the welfare relevance. Furthermore, the current on-going testing in an on-farm application in 60 dairy herds, assessing cow and calf welfare, will reveal more information on feasibility. The latter also included a parallel assessment with the Welfare Quality system, giving further possibilities for comparison and supporting the general aim to limit the recording time of the final DAWIN protocol to a maximum duration of one hour on-farm. Nonetheless, the aspects of animal welfare covered within the index should/will follow a holistic concept and arise from the principles ‘good feeding’ ‘good housing’ ‘good health’ and ‘appropriate behaviour’. Because of the time constraint mentioned earlier the principle ‘appropriate behaviour’ has been severely cut-back. On the contrary, the criterion ‘comfort around resting’ within the principle ‘good housing’ currently has several indicators included. These are parameters of different types such as ‘lying down movement’, ‘getting up movement’, ‘lying outside lying area’, ‘bedding material’, ‘cleanliness of the cow’, ‘number of cubicles’, ‘tethering’.

The answers from the experts and comparison of the data of the different parameters from the on-farm assessments will show which of the indicators will be the most meaningful and feasible ones for the final version of DAWIN.

Currently the farm assessments for the 60 cattle farms are entering the final phase and the first calculated final Danish Animal Welfare Index (DAWIN) is expected for 2016.