

Assessing animal welfare in a dairy cattle herd with an automatic milking system: How can it be used as a farm decision support tool ?

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The interest in reduced workload in the housing system – particularly the milking routine, and expectation of increased milk yield as well as improved health has increased the interest in automatic milking systems (AMS) in dairy herds. An AMS production system offers new possibilities for day to day management and changes the daily life of the cow. It is expected that an important aspect of the public accept of these systems is that animal welfare is considered. Consequently there is a need for development of welfare indicators relevant for AMS herds as well as a welfare assessment system at herd level providing a decision support tool. A relevant welfare assessment system should describe the welfare of animals in the herd during a time period by welfare indicators in a manner that is comprehensible to the farmer, and allows the farmer to assess the development through time and act accordingly. A general concept for the assessment of animal welfare in an AMS dairy herd is developed at the Danish Institute of Agricultural Sciences. The applied concept involve indicators based on observations on the systems, the systems application, as well as animal behaviour observations and observations on health problems in the animals. The welfare indicators are measured during a year on AMS dairy herds. An annual report for presenting the welfare assessment to the farmer is developed. The report gives the farmer an overview, an evaluation as well as enough detailed documentation to accept the results as a consequence of the data recorded on the farm. The annual report is presented and discussed with the farmer and straightforward minor improvements are suggested. The idea is that a strategic plan, which include a prediction of the consequences for animal welfare can be made based on 2-3 annual reports. The welfare assessment system is developed for application as a decision support tool on the dairy herd. However it is anticipated that such reports can also be used in a dialogue between the dairy industry and the public. The concept is discussed and the outline of an annual report is presented at the congress.