

K-06-03**Management of animal welfare** (#31)

Harry Blokhuis

Swedish University of Agricultural Sciences, Uppsala, Sweden

**Short Abstract
Introduction**

Sophisticated genetic selection programmes, optimised feeding regimes and accurate management resulted in an enormous increase in production during the second half of the 20th century. Traditional housing systems were replaced by systems characterized by high animal density with minimal living space for the individual and a very barren environment (Blokhuis, 1999). The barren housing conditions, high production levels and profound mechanisation caused growing concern and fierce societal debate regarding the welfare of the animals (Blokhuis et al, 1998; Fraser, 2008). Nowadays, public concern for animal welfare is widespread and growing and welfare is becoming increasingly recognized as an important quality aspect of the product (Blokhuis et al., 2003).

Information for welfare management and market communication**Welfare management**

To manage welfare actively, farmers and other actors in the production chain need of course information about the welfare status of their animals. Apart from the information gathered with welfare assessments (e.g. Welfare Quality), effective animal welfare management requires knowledge about the relation between the welfare issue and the husbandry environment/practices and of course about specific risk factors in the environment. This knowledge may be available from experience of the manager or from advisors (e.g. the farm's veterinarian) or require actual assessment of the quality of resources. Finally, the combined information and available knowledge leads to management decisions.

In the farm's welfare management plan these steps should be thoroughly analysed and assessment methods and frequencies and sources of information should be defined.

Market communication

Information about the welfare status of the animals that produce our food is increasingly used to allow consumers to evaluate and appreciate the welfare quality of food. This information may be delivered in various forms such as general information, campaigns, or specific labelling of animal products. Approaches are different in different countries and markets depending on local/national circumstances or preferences and marketing strategies (Kjærnes and Lavik, 2008).

As pointed out by Miele et al. (2013), a key issue for any information that is

provided regarding the welfare status of farmed animals is the trustworthiness of the information. At present, most labels for animal welfare friendly products do not comply with a common standard and, in Europe, the animal welfare claims on products are not regulated. Thus, the 'animal welfare' improvements of different systems are difficult to compare because they are not based on the same criteria.

It is clear that also for market communication different categories of information are needed for the different purposes. However, it is also clear that the basis of information for welfare management as well as welfare communication is the same: the welfare status of the individual animal.

Future developments

Currently, many schemes assess animal welfare at the farm level with rather long intervals between assessments (months to years). Such intervals may be suitable for several of the goals mentioned above, but they are of limited value for daily on-farm management. Modern technology allows for more continuous monitoring of relevant welfare parameters and is therefore more applicable as a management tool. Obviously, such technology would also generate data to support welfare assessments for other purposes such as market communication (Blokhuis, 2018).

However, technology should only complement and not replace direct observation of the animals since it is likely that sensors will not 'see everything'. In addition, technology generated data could be combined with that obtained from other sources: veterinary or other inspection to improve management and housing systems as well as the provision of information to all actors in the animal production chains, for example processors, retailers, consumers, governments; through labelling or other means of communication.

Conclusion

Due to public concerns and the obvious effects on production and quality aspects, animal welfare should be considered a central concept in the management of the animal production sector to ensure societal acceptance and economic profitability.

References

- Blokhuis, H.J. (1999). Integration of animal welfare in intensive animal production. In: Th. Wensing (Ed.), *Production Diseases in Farm Animals*, Wageningen Pers, Wageningen, 222-229.
- Blokhuis, H.J. (2018). Animal Welfare information in a changing world. In:

Notes

- A. Butterworth (Ed.), *Animal Welfare Challenges: dilemmas in a changing world*. CABI, Wallingford, UK, 208-216.
- Blokhuis, H.J., Hopster, H., Geversink, N.A., Korte, S.M. and Van Reenen, C.G. (1998). Studies of stress in farm animals. *Comp. Haematol. Int.* 8, 94-101.
- Farm Animal Welfare Council (1992). FAWC updates the five freedoms. *Veterinary Record*, 17,357.
- Fraser, D. (2008). *Understanding Animal Welfare: The Science in its Cultural Context*. Wiley-Blackwell: Oxford, United Kingdom, 324 pp.
- Kjaernes, U. and Lavik, R., 2008. Opinions on animal welfare and food consumption in seven European countries. In: U. Kjaernes, B. B. Bock, E. Roe, and J. Roex (eds.), *Consumption, distribution and production of farm animal welfare opinions and practices within the supply chain, Welfare Quality Reports No. 7*. Cardiff, 1-117.
- Miele, M., Blokhuis, H.J., Bennett, R. and Bock, B., 2013. Changes in farming and in stakeholder concern for animal welfare. In: Blokhuis, H.J., Jones, R.B., Veissier, I. and Miele, M. (Eds.), *Improving farm animal welfare. Science and society working together: the Welfare Quality approach*. Wageningen Academic Publishers, Wageningen. 19-47.

Notes