

Adding value to end of lay hens: improving welfare, sustainability and credibility

C. A. Weeks¹, H. A. Elson², J. Jozefová³, F. Neijenhuis⁴, J. Yngvesson⁵ and E. Voslarova³

¹University of Bristol, School of Veterinary Sciences, Langford, Bristol, BS40 5DU, UK

²RSK ADAS Gleadthorpe, Meden Vale, Mansfield, Nottingham, NG20 9PF, UK

³University of Veterinary and Pharmaceutical Sciences Brno, Faculty of Veterinary Hygiene and Ecology, Department of Animal Protection, Welfare and Behaviour, 612 42 Brno, Czech Republic

⁴Wageningen Livestock Research, Animal Welfare and Health, De Elst 1, 6708 WD Wageningen, The Netherlands

⁵Swedish University of Agricultural Sciences, POB 234, SE-53223 Skara, Sweden

Corresponding author: claire.weeks@bristol.ac.uk

Abbreviated title: Adding value to end of lay hens

Summary

Currently the majority of hens at the end of lay are treated as a low value by-product of egg production to be disposed of as cost-effectively as possible, making hens vulnerable to mishandling. Such reduced welfare hampers the credibility of 'welfare-friendly' eggs and is an important driver for industry stakeholders to improve their image. Two case studies will be presented as examples of the innovative trials in the EU Hinnovation project involving grassroots-led networks. In the Netherlands, the issue of hen carcasses being rejected if contaminated by unsuitable material ingested by hens during feed withdrawal is being addressed. By altering management of the feed withdrawal period on farm, the aim is that hens are better prepared for transport. Preliminary data from trials of an energy-rich electrolyte solution in the drinking water or providing birds with clean small pebbles to eat, show promise that carcass contamination could be reduced. Concomitantly, reductions of inappropriate foraging behaviour and levels of hunger would indicate improved hen welfare. Avian influenza restrictions have delayed completion of the trials, but more results should be available at the symposium. Adding value to the end of lay bird is likely to translate into better handling and bird welfare. Thus, the Swedish partnership has developed cooking techniques and recipes to make hen meat more attractive for human consumption. The dishes were prepared and presented to food journalists and other stakeholders, who voted for their favourite (Sprängd höna, resembling Peking duck recipe). Consequent media reporting was very positive and could drive a demand for hen meat. Currently, partly as an effect of Hinnovation, there is a Swedish company setting up production of hen meat products from non-organic hens. The network is seeking uses for more parts of the hen (e.g. feet and combs) to further increase the end of lay value. General positive outcomes include an appreciation of the value of sharing knowledge and practices between countries and

bringing together people who would not otherwise have met or explored the range of opportunities available for adding value in every sense of the word.

Key words: Hens, transport, handling, networking, end of lay, welfare.