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Keel bone fractures in laying hens

1. We write to express strong concern about the negative impact of bone fractures on the welfare of laying hens. As we said in our Opinion on Osteoporosis and Bone Fractures in Laying Hens (FAWC 2010), **"The incidence of bone fractures of laying hens, both during and at the end of lay, is too high in all systems of husbandry."**

2. Defra-funded research project AW0234 at the University of Bristol (Defra 2008, Wilkins et al 2011) surveyed 67 flocks for bone fractures that occurred during the laying period (excluding those that occurred at depopulation or later). It found that 36% of hens from enriched cages had fractures of the keel bone and the average prevalence in non-cage systems ranged from 45 to 86%. In the worst flocks, 95% of hens had fractured keel bones. Those figures are completely unacceptable, and may be even worse if fractures of other bones were included.

3. There is strong evidence that bone fracture is painful. Since 2010, further such evidence has been obtained for keel bones by the University of Bristol (Nasr et al 2012a, b, Richards et al 2012).

4. We recommended in 2010 **"that the egg industry (including retailers) should aim to eliminate bone fractures in live birds altogether. To that end, it should develop a strategy of time-related reduction with interim targets for the prevalence of fractures both during lay and at depopulation."** However, any such strategy is handicapped by lack of routine information on current prevalence. We therefore further recommended that **"The industry should carry out surveillance in collaboration with Governments in Great Britain to establish trends in the prevalence of bone fractures in laying hens [and] identify the efficacy of various preventative measures. Design and management of systems to reduce and if possible prevent bone fractures should be given high priority."**

5. Considerable information is available from research and experience, both well-established and recent, that could be used to reduce fractures: on genetics,

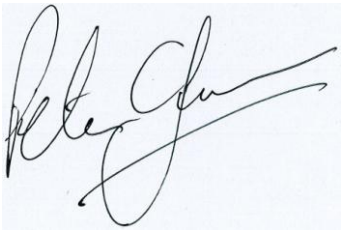
nutrition, system design and handling. Mechanisms need to be found to ensure that this information is put into practice.

6. We are informed by industry that they are actively engaged in many of these areas, for example the recent 'Osteoporosis in layers project' at Roslin Institute, which has identified genetic markers predictive of bone strength. However, we feel that a more co-ordinated approach to this problem is required.

7. We were encouraged to learn that the British Egg Industry Council wrote to previous Minister of State, Sir James Paice, on 1 July 2011, confirming that this issue is also of concern to the UK egg industry, and suggesting collaboration between Defra, industry and others. In particular, they suggested an Action Group on this issue, parallel to the Beak Trimming Action Group. We note that there has apparently been little progress on the matter since. We suggest that this is a subject that the Poultry Health and Welfare Group should include in their Poultry Health and Welfare Programme and take action on, with support from GB governments. It might also be possible to extend the remit of the Beak Trimming Action Group to cover this issue.

8. However, irrespective of discussions on how best to implement longer-term strategies to prevent fractures, we consider that urgent action is needed in the short term to determine the severity of the problem in current commercial flocks and its association with causal factors (such as breed and management system) and then to monitor progress in reducing it. **We recommend that a programme should be put in place to monitor bone fractures of end-of-lay hens at the abattoir, either in every delivery or in a systematic sample of deliveries, by palpation of a sample of birds and/or by examination of a sample of keel bones after their removal from the birds.** The Bristol research team have confirmed that training of people to carry out such monitoring would be possible. Such a programme is needed if this major cause of suffering – which evidence suggests is currently afflicting approximately half of all laying hens in this country – is to be significantly addressed.

Yours sincerely,



Peter Jinman
Chairman, Farm Animal Welfare Committee

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