BRIEFING ON THE WELFARE IMPLICATIONS OF BEAK TRIMMING BY HOT BLADE

AND INFRA-RED BEAM

Debeaking, often referred to as beak trimming, is a serious mutilation of poultry, which involves using a red-hot blade or an infra-red beam to amputate up to a third of the birds' beak. Laying hens are often beak trimmed to reduce the risk of welfare problems caused by feather pecking and cannibalism. However, beak trimming addresses the symptoms rather than the causes of feather pecking.

Scientific evidence and practical experience demonstrate that feather pecking and cannibalism can be controlled without beak trimming through the use of appropriate strains to reduce the hens' propensity to feather peck and good farm system design and management.

The consequences of beak trimming for welfare include trauma during the procedure, pain due to tissue damage and nerve injury, loss of normal function due to reduced ability to sense materials with the beak, and loss of integrity of a living animal.

The UK Government enacted an outright ban on beak trimming in 2002, with the ban due to come into force on 1 January 2011.

Farm Animal Welfare Council (FAWC)
In September 2009, the Farm Animal Welfare Council (FAWC) reiterated its view that;

> "*the mutilation of all livestock is undesirable and [FAWC] continues to regard beak trimming as a major insult to the hen's welfare*".

FAWC has also expressed concern about the use of the infra-red method of beak-trimming on the grounds that it leads to;

> "*trauma to the bird during the procedure; loss of a sensory tool; and loss of integrity of a living animal by the removal of part of its beak*".

FAWC concludes that these;

> "*outstanding welfare and ethical issues are common to any method of beak trimming*"

and reiterates its advice to Government to end routine beak trimming in Great Britain "*as soon as possible*".

Unfortunately, FAWC has advised an open-ended delay to the ban on beak trimming. Its letter to the Minister in September stated, "*We recommend that deferment of the ban on beak trimming should be reviewed in 2015, to decide when such a ban will be introduced.*"

Whilst not accepting the need for a delay, Compassion believes that, if there is to be a postponement, it should be time-bound with a clear date set for implementation from the outset. Simply removing the existing date of entry into force from the existing statutory instrument would effectively be a repealing of the existing ban, rather than a postponement.

Does infra-red represent a welfare improvement?

It has been suggested that the delay to the ban should be accompanied by the provision that infra-red beak treatment should be the only method permitted routinely. The suggestion seems to be that moving away from hot blade to infra-red is likely to represent a welfare improvement. Compassion's analysis of the evidence does not support this assertion. Moreover, we fear that the perception of such a move being a welfare advance might work to the detriment of any incentive for an outright ban in the future.

Scientific evidence
The following evidence is documented within Compassion's recent report, "Controlling feather pecking and cannibalism in laying hens without beak trimming" (October 2009) and full references cited below can be found in that document.

Scientific research shows that beak trimming results in acute pain whether it is performed by the traditional hot-blade method or the new infra-red procedure (Kuenzel, 2007; Marchant-Forde *et al,* 2008). Moreover, reductions in growth and feed intake in the weeks following trimming are reported to be greater after infra-red trimming than hot-blade trimming (Honaker and Ruszler, 2004; Marchant-Forde *et al,* 2008). This suggests that infra-red trimming may be as, or more, painful than the traditional hot-blade method.

It is indeed the case that one piece of recent research concluded that infra-red beak treatment of day old chicks does not demonstrate evidence of chronic pain. However, other recent research (Glatz and Hinch, 2008) found that infra-red beak trimming at day-old resulted in the formation and retention into adulthood of traumatic neuromas; these are swollen entangled nerve masses which have been implicated in causing chronic pain after beak trimming. Therefore, the science suggests the possibility of long term pain following infra-red beak trimming.

Glatz and Hinch (2008) also found that the pecking force of the infra-red treated birds was lower than that of birds hot-blade trimmed at day-old, which the authors suggest may be due to a greater incidence of neuromas, and consequently higher levels of pain, in the infra-red trimmed birds. The authors also found that infra-red treated birds show higher levels of fearfulness compared with hot-blade trimming at day-old. They suggest that the infra-red trimmed birds may have been subject to greater pain during the procedure and conclude that infra-red trimming at day-old has long lasting effects on fearfulness.

In conclusion, scientific research shows that infra-red trimming, like traditional hot-blade trimming, causes acute pain and that it may also lead to prolonged pain.

Mortality
Infra-red treatment is cited by FAWC (2005) as having several advantages over hot-blade trimming; there is no open wound; chicks trimmed using the hot blade method display greater levels of head shaking, beak rubbing/wiping, and whole body trembling after the procedure; and mortality after infra-red is reportedly lower.

This, together with the evidence in the previous section, suggests that the two methods have different profiles of suffering attributed to them, but that both methods result in poor welfare.

The industry's view
From participation in the Government's Beak-trimming Working Group, Compassion is aware that the industry has stated for some years that it is moving away from using the hot blade to the infra-red method. The industry has suggested that, in its opinion, this new method is intuitively better, and indeed largely problem-free, than the old. The Government

appears to have followed this thinking despite recent scientific evidence that infra-red causes acute pain and may also cause chronic pain.

Conclusion

In conclusion, scientific research shows that infra-red trimming, like traditional hot-blade trimming, causes acute pain and that it may also lead to prolonged pain. The evidence suggests that the two methods, hot blade and infra-red, whilst resulting in different profiles of symptoms, nevertheless, both result in poor welfare.

The evidence suggests that those birds subject to the infra-red procedure may experience welfare that is as poor, perhaps worse, than those subject to hot blade beak trimming. However, it is an important principle that one inhumane procedure should not be played off against another, particularly when there are practical alternatives, as in the case of beak trimming.

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