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Docket Nos. 1996P-0418, 1997P-0197, 1998P-0203, and 2000N-0504, "Prevention of *Salmonella enteritidis* in Shell Eggs During Production"

On behalf of The Humane Society of the United States (HSUS) and its 8 million constituents, we are submitting comments regarding the Proposed Rule "Prevention of *Salmonella enteritidis* in Shell Eggs During Production." We commend the Food and Drug Administration (FDA) for recognizing the link between on-farm production practices and the safety of the food supply and for taking measures to address it. As one of the most important measures to prevent *Salmonella* infection and spread, we urge the FDA to prohibit forced molting by feed withdrawal under this rule. Forced molting, as commonly practiced by the egg industry, should be banned, based on both animal welfare considerations and food safety concerns.

Inducing a molt through feed withdrawal compromises the welfare of laying hens. Hunger is a basic animal motivation, and to deprive animals in our care of food for as long as two weeks is unconscionable. Furthermore, the effects of hunger are exacerbated when laying hens are housed in cramped battery cages, which limit the animals' ability to express normal foraging behaviors. When hens are subjected to sudden food withdrawal, as they are for forced molting, they show behavioral signs indicating intense frustration. One commonly noted behavior is stereotypic pecking. Stereotypic behaviors are repetitive and function-less actions, which indicate that an animal's welfare is compromised. Another behavioral change is a marked increase in aggressive behavior, which can mean an increase in damage to cage mates (Duncan and Wood-Gush, 1971; Aggrey *et al.*, 1990). The exigency of these behavioral signs is confirmed by the most notorious "side-effect" of the starvation of laying hens: a sharp increase in mortality (Bell, 2000).

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The obvious welfare concerns associated with starving birds cause justifiable condemnation by animal advocates and understandable distaste among members of the public. Perhaps partially as a result, the practice has begun to decrease. Restaurant chains McDonald's, Wendy's, and Burger King now require producers who supply them with eggs not to force molt their laying hens (McDonald's, 2004; Wendy's, 2004; Burger King, 2004). The joint standards of the Food Marketing Institute and the National Council of Chain Restaurants require a phasing out of feed withdrawal molting (Food Marketing Institute, 2004). Even the egg industry appears to be moving away from starving hens to induce a molt, as illustrated by the United Egg Producers' standards which encourage producers and researchers to work together to develop alternatives to feed withdrawal for molting (United Egg Producers, 2004). However, while movement away from this inhumane practice could eventually become large scale, it is still urgent for the FDA now to prohibit forced molting in its ruling. Most egg producers do still starve hens for forced molting. It would be better to accelerate the adoption of humane approaches to husbandry by all producers, by regulation, than to allow late-conformers to continue this inhumane practice as long as they desire.

The FDA's proposed rule is based on the need to reduce *Salmonella enteritidis* (SE) contamination of eggs. We agree that this is important and we support the FDA as it examines and attempts to address on-farm issues that result in egg contamination. We argue that if forced molting is not prohibited in this proposed rule, an important and potentially major causal factor of SE contamination of eggs will continue to be allowed. There is considerable scientific support for this. Holt and coworkers at the U.S. Department of Agriculture's (USDA) Agriculture Research Service have published at least 16 studies clearly showing that birds force-molted by feed withdrawal are highly prone to SE infection and shed significantly higher numbers of SE during the molt (U.S. Department of Agriculture, 2002). Other researchers have confirmed these findings (Nakamura *et al.*, 1994, 1995; Kogut *et al.*, 1999; Moore *et al.*, 2004), including by investigating incompletely-successful methods to reduce SE colonization of hens during forced molting (Nakamura *et al.*, 2004; Ricke, 2004) – where we would argue that the logical approach is simply not to use forced molting. The risk of increased SE shedding when hens are starved to induce a molt is also noted by extension agents (Webster, 1999; Butcher and Miles, 2004).

In addition, as noted by the FDA in the docket we are commenting on, field data suggest a strong link between forced molting and production of SE-contaminated eggs (USDA *et al.*, 1995). As noted by the FDA, the authors of that report suggested that differences in egg contamination could be due to differences in laying hen ages. However, a study by Holt and Porter (1992) indicated, to the contrary, that increased shedding of SE by force-molted birds was unaffected by age. We also note the FDA's concern that the field data were potentially subject to sampling bias in favor of flocks known to be SE positive. We wish to point out that, if so, similar bias is also likely to affect the current quality assurance program, on which the FDA has based the recommendations in this docket, as it is also a voluntary program.

In conclusion, based on strong scientific evidence that forced molting compromises the welfare of laying hens and can compromise the safety of the eggs they produce we urge the FDA to ban forced molting by feed withdrawal under this ruling. Thank you for your time and consideration.

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- We can readily supply any of these references if they are needed for consultation.
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