

PETA

PEOPLE FOR THE ETHICAL
TREATMENT OF ANIMALS

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Dockets Management Branch (HFA-305)
FDA
5630 Fishers Lane, Rm. 1061
Rockville, MD 20852

Re: FDA Docket No. 00N-0504

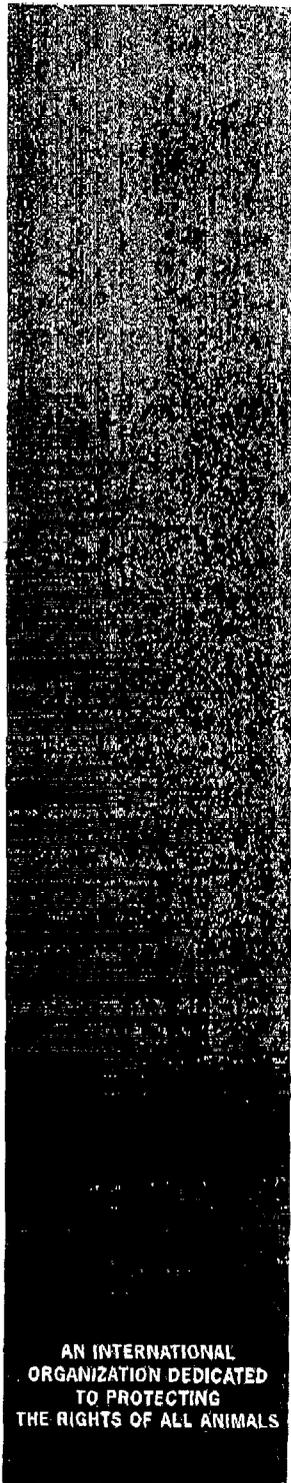
People for the Ethical Treatment of Animals (PETA) is an international nonprofit organization with more than 700,000 members dedicated to ending animal suffering. Please accept the following comments on behalf of our members regarding the "Current Thinking Papers on National Standards for Egg Safety," (herein referred to as the "Standards") as described in 54 FR 42707.

The latest version of the Standards fails to adequately address the issue of egg infection-causing farming practices, particularly forced molting, despite the overwhelming evidence that eliminating this common practice would significantly reduce human *Se* infections across the country. In order to effectively reduce the hazards of *Se*, it is absolutely critical to eliminate vectors of transmission that cause eggs to become infected in the first place. We therefore ask that your agency include a strict prohibition on forced molting as an integral part of the final version of the Standards.

Government scientists have shown that forced molting leads to higher rates of *Salmonella enteritidis* (*Se*), causing serious human illness, and sometimes death. For example, the U.S. Department of Agriculture (USDA) recently reported that the number of human *Se* infections would be significantly reduced if forced molting were eliminated.¹ Even the USDA's Food Safety and Inspection Service (FSIS) advises that "in an effort to reduce human illnesses caused by *Se*, FSIS is encouraging poultry and egg producers to eliminate forced molting practices."²

Another USDA study concludes that forced molting increases the frequency and severity of *Se* infections of a flock regardless of an individual hen's age³ and "could conceivably alter the *Se* situation in a flock from a minor problem involving a small number of birds to one where a large number of birds [are] affected."⁴ Similarly, a study out of the University of Florida finds that stress caused by a forced molt significantly compromises the immune system of laying hens, resulting in higher levels of *Se* infections.⁵ Furthermore, the study concludes that forced molting is detrimental to the *Se* rate of the entire flock: "Molted birds shed significantly higher numbers of *Se* during a forced molt as compared to unmolted birds ... and [forced molting] causes an increase in the transmission of *Se* to uninfected hens housed in adjacent cages."⁶ These studies are only a sample of the many in existence pointing toward the dangerous implications forced molting has on both animal and human health.⁷

The Food Animal Concerns Trust in the United States also reports that by using systems that preclude forced molting for layers, *Se* was reduced by up to by 70%. And the top consumer groups in the U.S. have taken a strong stance against the practice due to the serious health risks it creates for consumers, including the Center for Science in the Public Interest, Consumers Union (publisher of *Consumer Reports*), and Public Citizen.



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Even the United Egg Producers Animal Welfare Committee recently wrote that "we do not believe that feed restriction or withdrawal to induce a molt should be continued."

These findings have serious implications for the health of our nation. This is apparent by applying the USDA's conservative estimate that human salmonella infections from eggs would be reduced by 2.1 percent if forced molting were eliminated⁸ to the 5900 reported cases of *Se* in the U.S. in 1998⁹. According to the Centers for Disease Control and Prevention, the actual number of cases is at least 38 times greater than those reported¹⁰ which means that in 1998, there were at least 224,200 cases of *Se*. Of these, 183,844 of them can be attributed to contaminated eggs.¹¹ Thus, by eliminating forced molting, approximately 3860 cases of *Se* poisoning can be avoided in the U.S. every year.¹² Furthermore, applying the case fatality rate provided in a recent article in *Emerging Infectious Diseases* to the number of reported *Se* cases in 1998, we can see that eliminating forced molting would save at least one life every year and could potentially save up to 46 annually.¹³

Monetary health-care costs to the nation and its citizens due to forced molting must also be considered. There have been many studies reporting the expensive consequences of *Se*.¹⁴ One such study, published in *The New England Journal of Medicine*, found that when adjusted for inflation,¹⁵ each nonreported case of Salmonella had a mean cost of \$314, and each reported case a cost of \$1961.¹⁶ For the former, costs were in terms of loss of salary or output, and for the latter, they were in terms of medical care or hospitalization. As a result, by eliminating forced molting, the country and its citizens will save, at the very least, \$1,378,387 each year,¹⁷ and with newer and stronger phages of *Se* developing, the increasing potential for unreported cases to worsen means that medical costs of more than \$7,569,460 could be avoided.¹⁸ If pain, suffering, and chronic disease costs were also included, these estimates would be significantly higher.

Perhaps the greatest hardships caused by forced molting, however, are to the hens themselves. This inhumane practice inflicts intense and unjustifiable suffering for more than 234 million hens each year by starving them for up to two weeks, often in complete darkness.¹⁹ Hundreds of thousands die, while those who survive shed their feathers, lose up to 35 percent of their body weight, and grow weak. The stressful conditions weaken the birds' immune systems so badly to the point that they become prone to disease, especially *Se* infections. The result is sick birds and contaminated eggs.

Any one of the nearly 4 million infected eggs produced every year in the U.S. can cause a dangerous *Se* outbreak that can affect hundreds of individuals.²⁰ It is therefore imperative that the *Se* infection be prevented and addressed in the hen, at the source of the problem, by explicitly prohibiting the practice of forced molting. The serious risks to human health and animal welfare caused by forced molting can no longer be ignored; the occurrence of fatal *Se* poisonings and severe animal suffering caused by the practice are all too real. Once again, on behalf of our members, we urge the relevant agencies to adopt specific language prohibiting forced molting in the Egg Safety National Standards and, as a result, help reduce animal suffering, human illness, and taxpayer medical costs.

Thank you for the opportunity to comment.

Sincerely,



Cem Akin
Research Associate
Research & Investigations Department

References

- ¹ USDA Farm Animal Well-Being Task Group, "Meeting Summary," Washington, D.C., 21 Jul., 1998.
- ² In a letter dated Aug. 21, 1998, from Patricia Stolfa, Acting Director, Regulations Development and Analysis Division, Office of Policy, Program Development and Evaluation, U.S. Food Safety and Inspection Service
- ³ U.S. Department of Agriculture, Agricultural Research Service, Peter S. Holt & Robert E. Porter, Jr., "Effect of Induced Molting on the Course of Infection and Transmission of *Salmonella enteritidis* in White Leghorn Hens of Different Ages," *Poultry Science*, 71 (1992), pp. 1842-1848.
- ⁴ *Ibid*, p. 1847.
- ⁵ Gary D. Butcher, D.V.M., Ph.D. and Richard Miles, Ph.D., "Salmonella Control and Molting of Egg-Laying Flocks—Are they Compatible?" Fact Sheet VM 92 (University of Florida, Jul. 1994).
- ⁶ *Ibid*, p. 2.
- ⁷ For other studies, please see:
 Gary D. Butcher, D.V.M., Ph.D., and Richard Miles, Ph.D., Institute of Food and Agricultural Sciences Fact Sheet VM 92, "Salmonella Control and Molting of Egg-Laying Flocks – Are They Compatible?" (University of Florida, Jul. 1994).
 J. Durant, D.E. Corrier, J.A. Byrd, L.H. Stanker, and S.C. Ricko, "Feed Deprivation Affects Crop Environment and Modulates Salmonella Enteritidis Colonization and Invasion of Leghorn Hens," *Applied and Environmental Microbiology*, 65, No. 5, May, 1999, p. 1919-1923.
 P.S. Holt, "Effects of Induced Moulting on Immune Responses of Hens," *Br. Poultry Sci*, 33 (1992), pp. 165-175.
 P.S. Holt, "Effect of Induced Molting on B Cell and CT4 and CT8 T Cell Numbers in Spleens and Peripheral Blood of White Leghorn Hens," *Poultry Sci*, 71 (1992), pp. 2027-2034.
 P.S. Holt, "Effect of Induced Molting on the Susceptibility of White Leghorn Hens to a Salmonella Enteritidis Infection," *Avian Dis*, 37 (1993), pp. 412-417.
 P.S. Holt, "Horizontal Transmission of Salmonella Enteritidis in Molted and Unmolted Laying Chickens," *Avian Dis*, 39 (1995), pp. 239-249.
 P.S. Holt, R.J. Bulur, D.L. Cunningham, and R.E. Porter Jr., "Effect of Two Different Molting Procedures on a Salmonella Enteritidis Infection," *Poultry Sci*, 73 (1994), pp. 1267-1275.
 P.S. Holt, N.P. Macri, and R.E. Porter Jr., "Microbiological Analysis of the Early Salmonella Enteritidis Infection in Molted and Unmolted Hens," *Avian Dis*, 39 (1995), pp. 55-63.
 P.S. Holt, N.P. Macri, and R.E. Porter, "The Effects of Induced Molting on the Severity of Acute Intestinal Infection Caused by Salmonella Enteritidis," Agricultural Research Service Report No. 0000070701 (1996).
 P.S. Holt and R.E. Porter, "Effect of Induced Molting on the Course of Infection and Transmission of Salmonella Enteritidis in White Leghorn Hens of Different Ages," *Poultry Science*, 71 (1992), pp. 1842-1848.
 M. Nakamura, N. Nagamine, T. Takahashi, S. Suzuki, M. Kijima, Y. Tamura, and S. Sato, "Horizontal Transmission of Salmonella Enteritidis and Effect of Stress on Shedding in Laying Hens," *Avian Dis*, 38 (1994), pp. 282-288.
- ⁸ USDA Farm Animal Well-Being Task Group, "Meeting Summary," Washington, D.C., 21 Jul., 1998.
- ⁹ Centers for Disease Control and Prevention, "1998 Annual Salmonella," Table 1.
- ¹⁰ P. Mead, L. Slutsker, V. Dietz, L. McCaig, J. Bresce, C. Shapiro, P. Griffin, and R. Tauxe, "Food-Related Illness and Death in the United States," *Emerging Infectious Diseases*, 5, No. 5 (1999).
- ¹¹ According to B. Mishu, J. Koehler, L. Lee, D. Rodriguc, F.H. Brenner, P. Blake, and R.V. Tauxe, "Outbreaks of Salmonella Enteritidis Infections in the United States, 1985-1991," *J Infect Dis*, 169, No. 3, pp. 547-52, 82 percent of infections were due to shell eggs. Thus, 224,200 multiplied by .82 yields 183,844. Furthermore, reported cases due to contaminated shell eggs numbered 4838 (5900 x .82) while unreported cases numbered 179,006 (218,300 x .82).
- ¹² 2.1 percent of 183,844 is 3860.
- ¹³ According to P. Mead, L. Slutsker, V. Dietz, L. McCaig, J. Bresce, C. Shapiro, P. Griffin, and R. Tauxe, "Food-Related Illness and Death in the United States," *Emerging Infectious Diseases*, 5, No. 5 (1999), the case fatality rate for nontyphoidal Salmonella is .0078. So, 5900 x .0078 is 46.02. The 2.1 percent reduction if forced molting were eliminated yields .966 lives saved every year (46.02 x 2.1% = .966).
- ¹⁴ For other studies, please see:
 "Salmonellosis Shown to Cost \$487 and \$535 Per Case," *Can Med Assoc J*, 120, No. 4, 17 Feb., 1979, p. 497.
 P.N. Sockett and J.A. Roberts, "The Social and Economic Impact of Salmonellosis," *Epidemiol Infect*, 107 (1991), pp. 335-347.

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- I.A. Roberts and P.N. Sockett, "The Socio-Economic Impact of Human Salmonella Enteritidis Infection," *Int J Food Microbiol*, 21, Jan. 1994, pp. 117-29.
- P.N. Sockett, "The Economic Implications of Human Salmonella Infection," *J Appl Bacteriol*, 71, No. 4, Oct. 1991, pp. 289-95.
- J.C. Buzby and T. Roberts, "Economic Costs and Trade Impacts of Microbial Foodborne Illness," *World Health Stat Q*, 50, No. 1-2 (1997), pp. 57-66.
- ¹⁵ Original monetary figures adjusted to 1998 dollar values using the *Columbia Journalism Review* conversion equation.
- ¹⁶ Mitchell Cohen, M.D., Robert Fontaine, M.D., Robert Pollard, M.A., Stephen VonAllmen, M.A., Thomas Vernon, M.D., and Eugene Gangarosa M.D., "An Assessment of Patient-Related Economic Costs in an Outbreak of Salmonellosis," *N Engl J Med*, 299, No. 9, 31 Aug. 1978, pp. 459-60.
- ¹⁷ Using the 2.1 percent reduction in *Se* cases if forced molting were eliminated, we find that there would be 101 fewer reported cases ($2.1\% \times 4838$) and 3759 fewer nonreported cases ($2.1\% \times 179,006$) due to contaminated eggs (see footnote 15). Thus, $(101) (\$1961) + (3759) (\$314) = \$1,378,387$.
- ¹⁸ Again, using the 2.1 percent reduction in *Se* cases if forced molting were eliminated (a reduction of 3860 cases), we find that if all cases were to be reported, the figure would be $(3860) (\$1961) = \$7,569,460$.
- ¹⁹ The number of laying hens in the U.S. in 1998, according to USDA-NASS Document POU 2-4/99, "Layers and Egg Production: 1998 Summary," is 312,058,000 and according to Donald Bell, "Moulting Technologies - Welfare Issues," University of California, 75 percent of the nation's flock is force-molted. Thus, $312,058,000 \times .75 = 234,043,500$.
- ²⁰ According to GAO report #GAO/RCED-99-184, one in every 20,000 eggs is infected with *Se*. Thus, of the 79,717,000,000 eggs produced every year in the U.S. (figure from USDA-NASS Document POU 2-4/99, "Layers and Egg Production: 1998 Summary"), at least 3,985,850 will be infected.



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| To: Nancy Bufano, FDA | From: Cem Akin |
| Fax: 202-205-4422 | Pages: 5 |
| Phone: 202-401-2022 | Date: 8/14/00 |
| Re: Egg Safety Comments | CC: |

Dear Ms. Bufano,

Per our phone conversation earlier today, please accept the attached as our comments regarding FDA Docket 00N-0504.

Feel free to contact me if there are any questions. I can be reached at 757-622-7382, ext. 492.

Thanks again for your time.

Sincerely,

Cem Akin
Research Associate
Research, Investigations & Rescue Department



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