

Animal welfare recommendations and proposed plan of action for implementation at KFC suppliers

Date: March 11, 2005

To: Harvey Brownlee, Chief Operating Officer, KFC

From: Dr. Ian Duncan, Professor, University of Guelph

Dr. Temple Grandin, Associate Professor, Colorado State University

Dr. Mohan Raj, Senior Research Fellow, University of Bristol

We, the undersigned, submit the following recommendations for your review. We urge KFC to implement these guidelines in order to significantly improve poultry welfare at its supplier farms and slaughterhouses. Please do not hesitate to contact any one of us should you have any questions about any of the following topics.

I. Animal Care Standards (ACS)

The National Chicken Council (NCC) standards are way too lax to maintain acceptable standards of chicken welfare. The Animal Care Standards were developed by several members of KFC's own animal welfare committee and represent some of the best available standards in practice today. Suppliers should meet these standards and apply for certification under the "Certified Humane Raised and Labeled" logo within 2 years. A copy of the standards is attached and should be implemented under the oversight of KFC's animal welfare committee and the undersigned, and audited by Humane Farm Animal Care (HFAC) inspectors and auditors.

<p><i>Animal Care Standards recommendations:</i> Within 2 years, the ACS should be implemented at all KFC supplier farms.</p>

II. Controlled atmosphere killing (CAK)

Controlled-atmosphere killing systems using inert gases such as nitrogen and argon, with no more than 20 percent carbon dioxide, significantly improve poultry welfare, meat quality and yield, worker conditions, and increase revenue for the producer. The system is estimated to pay itself off within 1 to 2 years of installation.

It is crucial to employ CAK systems that kill birds rather than merely stun them. It is also critical that a drawer-system be used where birds are not dumped onto a conveyor belt at the plant, but rather moved in containers directly from the truck to the CAK device. Compared to electrical stunning methods, CAK completely eliminates suffering associated with dumping, handling, live shackling, pre-stun shocks, and missed stunning which leads to conscious throat-cutting and live scalding. CAK ensures a painless death where birds are shackled dead—thus greatly improving welfare and worker safety.

Raj (1998) summarizes the suffering associated with electrical stunning that could be avoided by using CAK: "stress and trauma associated with removing conscious birds from their transport containers, in particular, under the bird handling systems which require tipping or dumping of live poultry on conveyors; the inevitable stress, pain and trauma associated with shackling the conscious birds, i.e. compression of birds' hock bones by metal shackles; the stress and pain associated with conveying conscious birds hanging upside down on a shackle line which is a physiologically abnormal posture for birds; the pain experienced by some conscious birds that receive an electric shock before being stunned (pre-stun shocks); ... the pain and distress experienced by some conscious birds which miss being stunned adequately (due to wing flapping at the entrance to the water bath stunners) and then pass through the neck cutting procedure; [and]

the pain and distress associated with the recovery of consciousness during bleeding due to inadequate stunning and/or inappropriate neck cutting procedure.”¹

Raj and Gregory (1990) report that “[t]he main advantage of using gaseous stunning methods for poultry in comparison with electrical stunning is that the birds can be stunned in their transport crates and this would eliminate the pre-slaughter handling stress associated with uncrating and shackling live chickens.”²

And after visiting a chicken slaughterhouse that employed a controlled-atmosphere killing system using inert gases, Duncan (1997) wrote, “In my opinion, this is the most stress-free, humane method of killing poultry ever developed. The birds are quiet throughout the operation. They remain in the transport crate until dead and the killing procedure itself is fast, painless, and efficient. There is no risk of recovery from unconsciousness.”³

CAK recommendations: We recommend that CAK, using inert gases (with no more than 20% CO₂) and a drawer-system, be installed at all KFC-supplying slaughterhouses according to the following schedule: 1 plant within 6 months; 5 plants by the end of 2005; 1 plant at each of the 9 major companies which supply KFC within 2 years; and all remaining plants within 4 years. All gas killing systems must have windows where chickens’ reactions prior to loss of consciousness can be observed. Starting immediately, and until CAK is adopted, all KFC supplier plants should follow the Animal Care Standards for poultry slaughter, which are attached, and all plants should have cameras installed at critical handling points within 6 months to monitor compliance.

III. Breeding methods

Current broiler breeding programs lead to serious welfare problems, including leg deformities, lameness, cardiac failure, sudden death syndrome, and impaired immune function.^{4,5,6} Breeding for increased leg strength, slower growth, reduced breast muscle, and reduced aggression will drastically improve animal welfare.

Crippling of the legs causes tremendous suffering and can prevent chickens from reaching feed, leading to hunger or starvation. Gait or leg abnormalities and lameness have been linked to infections, footpad burns, hock burns, and other serious welfare problems.⁷ Mench (2004) reports that these problems are less prevalent in slower-growing strains of broilers.⁸ Duncan (2004) writes, “Without a doubt, the biggest welfare problems for meat birds are those associated with fast growth.”⁹ Furthermore, “[t]he increasing evidence of fast growth problems such as [skeletal problems] in meat strains of poultry indicate that the biological limit of growth is being reached and that it is a mistake to think that we can go on and on

¹ Raj ABM. 1998. Untitled. Proceedings from inert gas: A workshop to discuss the advantages of using inert gas for stunning and killing of poultry. 1998 Mar 30; University of Guelph, Guelph, Canada.

² Raj ABM, Gregory NG. 1990. Investigations into the batch stunning/killing of chickens using carbon dioxide or argon-induced hypoxia. *Research in Veterinary Science* 49:366.

³ Duncan IJH. 1997. Killing methods for poultry: A report on the use of gas in the U.K. to render birds unconscious prior to slaughter. Campbell Centre for the Study of Animal Welfare.

⁴ Mench J. 2004. Lameness. In: Weeks C and Butterworth A, eds. *Measuring and Auditing Broiler Welfare*. CAB International. Cambridge, MA. p 3-17.

⁵ European Commission. 2000 Mar 21. Scientific Committee on Animal Health and Animal Welfare. *The Welfare of Chickens Kept for Meat Production (Broilers)*. p 110. Located at: http://europa.eu.int/comm/food/fs/sc/scah/out39_en.pdf.

⁶ European Commission. *The Welfare of Chickens Kept for Meat Production (Broilers)*, p 26-7.

⁷ Mench J. Lameness, p 12-13.

⁸ *Ibid*, p 3.

⁹ Duncan I. 2004. Welfare problems of poultry. In: Benson GJ, and Rollin BE, eds. *The Well-Being of Farm Animals, Challenges and Solutions*. Blackwell Publishing. Ames, IA. p. 310.

selecting for increased growth rate without costs to the bird... The primary breeding companies must pay attention to this warning. They need to stop selecting for increased growth and pay attention to the total health of their birds instead.”¹⁰

Furthermore, since broiler breeders—who have been called “*gallus neglecticus*” by Dr. Joy Mench of the University of California at Davis—are the same strain, they suffer from the same welfare problems of broilers, but for longer. If allowed to eat *ad libitum* for their entire lives, which typically last more than a year, broiler breeders would experience an exceedingly high incidence of obesity, heat stress, infertility, lameness from joint, bone, and foot problems, and mortality associated with skeletal and heart disease.¹¹ As a result, producers severely restrict food for broiler breeders starting at 1 to 3 weeks of age, causing constant hunger, anxiety, and stress. Other studies conclude that high levels of aggression in broiler breeder males are also a result of genetic factors.¹² This causes producers to perform painful debeaking procedures on them. Breeding programs that work toward slower growth and less aggressive birds will help to alleviate the serious welfare problems of restricted diets and debeaking of breeders as well.

Breeding recommendations: KFC should attempt to work with its primary breeding companies to implement a breeding program selecting for reduced growth rates and breast muscle content, increased leg strength, and decreased aggression in broilers. To ensure transparency and verifiability throughout the process, records of leg deformities, lameness, and other fast-growth conditions must be kept and inspected by auditors. Incidences of leg deformities and lameness must be reduced by, at the very least, 5% each year, with the goal reducing leg deformities and lameness to a virtually non-existent level within 10 years—and so that feed restriction and debeaking of broiler breeders can also be phased out. Market ready birds must have 95% or better normal gait scores. A specific breeding action plan should be developed under guidance of the undersigned within 3 months.

IV. Use of antibiotics, arsenic, and growth-promoting substances

Non-therapeutic antibiotics, drugs, and feed additives such as arsenic, are commonly used on healthy animals to increase growth rates and combat unsanitary, unhealthy rearing conditions. The use of such substances should be ended.

Considering the serious welfare problems that result from high growth rates, the use of growth-promoting substances for non-therapeutic purposes is not acceptable on welfare grounds. Rapid growth has been linked to gait abnormalities, lameness, cardiac failure, sudden death syndrome, and impaired immune function, among other things.^{13,14,15} Lameness and gait abnormalities can result in starvation, breast blisters, footpad burns, hock burns, and infected skin wounds.¹⁶ Mench (2004) writes, “It is obvious from their clinical manifestations that many gait disorders must be painful, since they involve inflammations, spinal cord damage, tension on the joints or rupture of tendons.”¹⁷

The World Health Organization and the American Medical Association have also come out against the use of all non-therapeutic drugs and antibiotics in healthy animals due to human health concerns. We concur that healthy chickens must not be given drugs of any sort, growth-promoting or otherwise.

¹⁰ Duncan I. Welfare problems of poultry, p 311.

¹¹ European Commission. The Welfare of Chickens Kept for Meat Production (Broilers), p 83.

¹² Millman ST, Duncan IJH. 2000. Strain differences in aggressiveness of male domestic fowl in response to a male model. *Applied Animal Behaviour Science* 66:217-33.

¹³ Mench J. Lameness, p 3-17.

¹⁴ European Commission. The Welfare of Chickens Kept for Meat Production (Broilers), p 110.

¹⁵ *Ibid*, p 26-27.

¹⁶ Mench J. Lameness, p 12.

¹⁷ *Ibid*.

Non-therapeutic drugs and substances recommendations: All non-therapeutic antibiotics, drugs, and feed additives, including growth-promoting substances, must be phased out. Adopting the timetable used by the European Union, the use of these substances must be completely phased out within 4 years. To ensure transparency and verifiability throughout the process, records of antibiotic use and feed composition must be kept and examined by auditors to ensure that non-therapeutic drugs and substances have been reduced on all supplier farms by 50% within 2 years. A specific action plan must be developed under guidance of the undersigned within 3 months.

V. Automated gathering

The use of well-designed mechanical gathering machines that are gentle on birds have been shown to improve welfare compared to manual catching on broiler farms and can also lead to economic savings from reduced labor costs and damage to birds.

Duncan *et al.* (1986) found that machines could perform better than manual methods in terms of stress to the birds. The study found that birds caught by machines returned to a normal heart rate more quickly than those caught manually, “suggesting they were less stressed,” and the duration of tonic immobility—when birds are literally frozen with fear—was much longer for birds who had been caught manually. The study concluded that “both measures of short-term stress suggested that the birds were less frightened after being harvested by machine” and that “one possible way of alleviating the catching and crating problem is to harvest the birds mechanically.”¹⁸

We understand that some KFC-suppliers are already using mechanical gathering machines with positive results. Perdue Farms, Inc., which recently started using catching machines in some of its facilities, reported a 14 percent decrease in bruising and stated that the machines “aren’t as rough on the birds.”¹⁹ A worker from Tyson Foods, Inc., who used to catch chickens manually but now does so with a machine, was quoted as saying, simply, “This is much easier on everybody.”²⁰

Automated gathering recommendations: Mechanical gathering machines that are gentle on birds should be implemented on all supplier farms. After consultation with the undersigned, an action plan will be developed within 3 months that identifies specific models and brands that are best for welfare. Once identified, the machines shall be incorporated on all supplier farms at a rate that allows 50 percent of the farms to be using the machines within 1 year, 75 percent within 2 years, and 100 percent within 3 years. A system of objective numerical scoring must be used, starting immediately, to evaluate the percentage of broken and dislocated wings, bruises, and broken legs that occur during catching and handling.

VI. Transparency and verifiability

It is essential that these recommendations be implemented with complete transparency and verifiability. Following a principle that has already been committed to by McDonald’s and Burger King, KFC should share these laudable improvements with the industry and its customers in order to ensure industry-wide change. Toward that end, KFC should release reports via its website every 6 months on its animal welfare progress. Finally, all KFC supplier farms and slaughterhouses must agree to regular, unannounced audits by an auditing agency chosen by the undersigned.

¹⁸ Duncan IJH, Gillian SS, Kettlewell P, Berry P, Carlisle AJ. 1986. Comparison of the stressfulness of harvesting broiler chickens by machine and by hand. *British Poultry Science* 27:109-114.

¹⁹ Meat Industry Internet News Service. 2000. Does Perdue have a chicken-catching machine? *Meat Industry Insights* [serial online]. Located at: www.spcnetwork.com/mii/2000/000618.htm.

²⁰ Associated Press. 2003 Jun 4. Chicken catching goes high tech.

VII. Conclusion

We are very pleased to be a part of this process. When KFC makes the changes we are recommending, the entire industry will follow its lead. This will represent an important step forward for the poultry industry, an industry that has thus far been lagging behind the pork and beef industries in responding to growing consumer pressure to improve animal welfare.

Sincerely,

A handwritten signature in cursive script that reads "Ian Duncan".

Ian Duncan, Ph.D.
Professor
University of Guelph

A handwritten signature in cursive script that reads "Temple Grandin".

Temple Grandin, Ph.D.
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A handwritten signature in cursive script that reads "Mohan Raj".

Mohan Raj, Ph.D.
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Humane Farm Animal Care

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March 11, 2005

Harvey Brownlee
Chief Operating Officer
KFC

From: Adele Douglass
Executive Director

Joy A. Mench, PhD
Chair, Scientific Committee
University of California - Davis

We understand that Drs. Duncan, Raj and Grandin have recommended that KFC's suppliers apply for certification on the "Certified Humane Raised and Handled" program. We are very pleased to provide you with information about this program, which was developed specifically to ensure high standards of animal welfare on farms in North America.

The Humane Farm Animal Care, "Animal Care Standards" (ACS) for chickens used in broiler production were written by a veritable "Who's Who" of animal scientists and veterinarians (see below). The standards were formulated after an extensive review of the scientific literature, and are reviewed regularly to take account of current scientific information. There are U.S. broiler producers already certified on the "Certified Humane Raised and Handled" program, demonstrating that the program is realistic and achievable under typical production conditions in North America.

In order to be certified, broiler production facilities and programs must be inspected annually, from "hatch to slaughter". Only producers that meet or exceed the ACS can be certified. All of the inspectors on the program have advanced degrees in animal science or are veterinarians, and only those with poultry knowledge and experience inspect poultry facilities.

Humane Farm Animal Care is working towards ISO Guide 65 Certification which means that there are set processes and procedures for all aspects of the program from development and revision of standards to the inspection and certification process.

Developing a plan to have KFC's suppliers meet the "Certified Humane Raised and Handled" standards would represent a tangible step KFC can take to achieve significant welfare improvements for the chickens it raises and slaughters.

We note that the letter from Drs. Duncan, Grandin and Raj also recommend several specific areas to be addressed by KFC. These include the use of sub-therapeutic antibiotics, mechanized catching, and Controlled Atmosphere Killing (CAK). The ACS already prohibits the use of antibiotics and other growth promoting substances for non-therapeutic purposes. They do not require the use of mechanized catching or CAK, although they do include standards for CAK when it is used. Nor do they lay out specific recommendations for breeding programs, since primary breeders are not inspected as part of the program. However, we agree that all of these are very important areas for further consideration that could lead to significant improvements in broiler welfare. A major strength of the "Certified Humane Raised and Handled" program is that it is outcome-based. Therefore, the Inspectors have the flexibility to work with and certify individual producers who wish to implement innovative technologies or modify their husbandry programs, as long as these changes result in demonstrable improvements in animal welfare.

A copy of the ACS is enclosed. We are ready to answer any of your questions and assist you in any way in helping your suppliers to meet these standards and to attain certification.

Members of the HFAC Scientific Committee

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