



Animal Welfare Institute

900 Pennsylvania Avenue, SE, Washington, DC 20003

February 15, 2022

CARE Auditing Program
Where Food Comes From
202 6th Street, Suite 400
Castle Rock, CO 80104

Via electronic mail to: publiccomment@wherefoodcomesfrom.com

RE: Animal Welfare Institute Comment on Draft PorkCARE Standards

To Whom It May Concern:

We write to submit comments on the draft PorkCARE standards on behalf of the staff and membership of the Animal Welfare Institute (AWI). AWI appreciates the opportunity to comment and commends Where Food Comes From (WFCF) for soliciting feedback from interested stakeholders such as AWI.

As previously expressed, AWI is very concerned that the CARE Certified Program is likely to result in consumer deception because it conveys a message to consumers that animals have been raised to a standard of care higher than the conventional animal agriculture industry. With the proposed standards of the PorkCARE program and the established BeefCARE program, CARE Certified simply cannot substantiate this perception. AWI highly recommends that WFCF substantially modify its program to meet these expectations, especially as the program grows. If WFCF does not make appropriate changes that address our concerns, AWI may pursue legal remedies on behalf of consumers who seek higher welfare options.

Review of the PorkCARE Standards

AWI commends Where Food Comes From for its expressed goal of ensuring that pigs raised for pork “are free from hunger and thirst, discomfort, pain, injury, disease, and distress, and the Pork/Swine facilities allow them to express natural behaviors.” To help ensure that your PorkCARE standards effectively promote this goal, are based on sound science, and maintain standards similar to those of other independent third-party animal-welfare certification programs, AWI would like to recommend the following modifications to some of your standards. These recommendations are based on the latest scientific research and incorporate comparisons with other legitimate animal welfare certification

programs, including American Humane Certified (AHC),¹ Certified Humane (CH),² Certified Animal Welfare Approved (AWA),³ and Global Animal Partnership (GAP).⁴

Section SAC4. Health Plan

Recommended standard SAC4d: “Stockpersons follow PQA Plus best practices for all animal health products to include recommended injection sites. If performed, castration is completed at age seven days or younger. Tail docking is prohibited except in exceptional circumstances, as a temporary measure, when the facility’s tail biting management program has failed to adequately control tail biting. Teeth clipping or grinding are not routinely performed; if needed due to significant wounding caused by needle teeth, it is acceptable as a temporary measure while management issues are addressed, and must be done within 72 hours of birth, taking care to avoid splintering the teeth, entering the sensitive pulp chamber of the tooth, or damaging the gums. With all painful procedures, pain should be minimized using selection of appropriate tools and methods. Pain management using approved or AMDUCA-permissible drug protocols is strongly recommended.”

Rationale for recommended standard: Given that WFCF has the express goal of ensuring pigs are free from pain and discomfort, it is essential that the leading cause of pain in farmed pigs – painful physical alterations – be addressed in the standards.

Scientific research has now demonstrated unequivocally that castration, tail docking, and teeth clipping all cause significant acute pain to piglets.^{5, 6} In addition, tail docking and teeth clipping/grinding are very likely to cause chronic pain, potentially lasting until the time of slaughter, in many of these pigs.

Tail docking leads to the formation of neuromas (enlarged and disorderly bundles of nerve endings that result from the severing of a nerve) which cause various types of long-term pain and abnormal sensations in a percentage of amputees (2.7% to 30% in human patients).^{7, 8} In pigs, numerous studies have found that the majority of pigs who have undergone tail docking have neuromas in their tail

¹ American Humane Certified, *Animal Welfare Standards for Swine* (Apr. 2017)

<https://www.americanhumane.org/app/uploads/2021/08/Swine-Full-Standards.pdf>.

² Humane Farm Animal Care (a/k/a Certified Humane), *Animal Care Standards Pigs* (Jan. 2018)

http://certifiedhumane.org/wp-content/uploads/Std18.Pigs_.1A-3.pdf.

³ A Greener World, *Certified Animal Welfare Approved by AGW Standards for Pigs* (2021)

<https://agreenerworld.org/wp-content/uploads/2022/02/AWA-Pig-Standards-2021-v2.pdf>.

⁴ Global Animal Partnership, *5-Step® Animal Welfare Standards for Pigs v2.4* (May 2020)

<https://globalanimalpartnership.org/wp-content/uploads/2020/05/G.A.P.s-Animal-Welfare-Standards-for-Pigs-v2.4.pdf>. AWI’s comparison is of operations that are GAP step 2 or higher. GAP step 1 represents an entry level to the program that is representative of standard industry practices.

⁵ Sutherland, M. A. (2015). Welfare implications of invasive piglet husbandry procedures, methods of alleviation and alternatives: a review. *New Zealand veterinary journal*, 63(1), 52–57.

<https://doi.org/10.1080/00480169.2014.961990>

⁶ Kleinhenz, M., Viscardi, A., & Coetzee, J. (2021). Invited Review: On-farm pain management of food production animals. *Applied Animal Science*. 37. 77-87. <https://doi.org/10.15232/aas.2020-02106>

⁷ van der Avoort, D. J., Hovius, S. E., Selles, R. W., van Neck, J. W., & Coert, J. H. (2013). The incidence of symptomatic neuroma in amputation and neurorrhaphy patients. *Journal of plastic, reconstructive & aesthetic surgery: JPRAS*, 66(10), 1330–1334. <https://doi.org/10.1016/j.bjps.2013.06.019>

⁸ Rajput, K., Reddy, S., & Shankar, H. (2012). Painful neuromas. *The Clinical journal of pain*, 28(7), 639–645. <https://doi.org/10.1097/AJP.0b013e31823d30a2>

stumps at the time of slaughter.^{9, 10, 11} There is also evidence that pain sensitivity is increased in the stumps of docked tails for at least 16 weeks afterward.¹²

Just as with teeth of other species, piglets' needle teeth contain sensitive nerves and blood vessels within each tooth's pulp chamber, and this pulp chamber extends down to the underlying bone. Clipping and grinding often cause the pulp chamber to be exposed, which commonly results in hemorrhage, infection, abscessation, gingivitis, and/or pulpitis (inflammation of the tissue within the pulp chamber).^{13, 14} Such lesions are associated with severe pain in humans and, given that their dental anatomy is very similar, piglets almost certainly have the same experience. Teeth clipping is generally more likely to cause more severe injuries, such as fracture or splintering of the teeth, but is faster than grinding.^{15, 16} Teeth grinding is considered more stressful because it produces more noise and heat. Pigs typically lose their needle teeth around the 50th day of life (sometimes quite a bit later), and they likely experience pain throughout this period when the pulp chamber of one or more teeth has been exposed.

Pain minimization and management are essential to ensuring animal welfare. As currently written, the standard would only require that painful procedures be performed early enough that the wounds are healed by the time of weaning. In contrast, all independent third-party animal welfare certification programs set additional limits around painful physical alterations. All of them ban castration in piglets older than ten days of age, unless pain relief is used. Most of them prohibit routine tail docking and teeth clipping outright; even those without a strict prohibition set additional requirements, such as performing the procedure before a certain age, a veterinarian's recommendation for the procedure, and/or use of analgesia. Numerous national and international veterinary organizations recommend

⁹ Sandercock, D. A., Smith, S. H., Di Giminiani, P., & Edwards, S. A. (2016). Histopathological Characterization of Tail Injury and Traumatic Neuroma Development after Tail Docking in Piglets. *Journal of comparative pathology*, 155(1), 40–49. <https://doi.org/10.1016/j.jcpa.2016.05.003>

¹⁰ Herskin, M. S., Thodberg, K., & Jensen, H. E. (2015). Effects of tail docking and docking length on neuroanatomical changes in healed tail tips of pigs. *Animal: an international journal of animal bioscience*, 9(4), 677–681. <https://doi.org/10.1017/S1751731114002857>

¹¹ Kells, N. J., Beausoleil, N. J., Johnson, C. B., Sutherland, M. A., Morrison, R. S., & Roe, W. (2017). Comparison of neural histomorphology in tail tips from pigs docked using clippers or cautery iron. *Animal: an international journal of animal bioscience*, 11(7), 1222–1227. <https://doi.org/10.1017/S1751731116002500>

¹² Di Giminiani, Edwards, S. A., Malcolm, E. M., Leach, M. C., Herskin, M. S., & Sandercock, D. A. (2017). Characterization of short- and long-term mechanical sensitisation following surgical tail amputation in pigs. *Scientific Reports*, 7(1), 4827–4829. <https://doi.org/10.1038/s41598-017-05404-y>

¹³ Hutter, S., Heinritzi, K., Reich, E., & Ehret, W. (1993). Auswirkungen verschiedener Methoden der Zahnresektion beim Saugferkel [Effects of different methods of tooth resection in suckling piglets]. *Tierärztliche Praxis*, 21(5), 417–428.

¹⁴ Hay, M., Rue, J., Sansac, C., Brunel, G., & Prunier, A. (2004). Long-term detrimental effects of tooth clipping or grinding in piglets: A histological approach. *Animal Welfare*, 13, 1-6. https://www.researchgate.net/publication/233501058_Long-term_detrimental_effects_of_tooth_clipping_or_grinding_in_piglets_A_histological_approach

¹⁵ Hutter, S., *supra* note 13.

¹⁶ Lewis, E., Boyle, L.A., Lynch, P.B., Brophy, P., & O'Doherty, J.V. (2005). The effect of two teeth resection procedures on the welfare of piglets in farrowing crates. Part 1. *Applied Animal Behaviour Science*, 90(3), 233–249. <https://doi.org/10.1016/j.applanim.2004.08.022>

against routine teeth clipping and/or tail docking and urge producers to adjust management practices to help achieve this goal.^{17, 18, 19, 20}

Assuming PorkCARE adopts our recommendations for its standard SAC4d, several other standards that mention painful procedures will need to be similarly edited, including SAC4a, SAC6e, and SAC9g.

Recommended standard SAC4e: “Weaning practices are implemented to reduce stress, such as providing environmental enrichment and solid food prior to weaning and keeping newly weaned piglets with their littermates. Piglets must be weaned at no younger than 28 days. Weaning age is calculated from the farrowing date of the individual sow. Early weaning can be performed only if a veterinarian determines that the health or welfare of the sow and/or her litter is in jeopardy.”

Rationale for recommended standard: Weaning, especially abrupt, forced weaning as typically practiced in conventional animal agriculture, is acknowledged to be a highly stressful experience for piglets, so reducing the stress associated with weaning is a laudable goal. Unfortunately, as written, the current standard is very vague. It would be difficult for an evaluator or producer to assess compliance, or lack thereof, with the standard.

Under natural conditions, weaning is a gradual process that involves changing the food source, decreasing levels of maternal care, and allowing more time for foraging in novel environments. Free-roaming domestic pigs in semi-natural conditions naturally wean at an average of 17.2 weeks.²¹

Research has shown that providing piglets with environmental enrichment prior to weaning can help them develop behaviors that will be necessary after weaning, such as chewing, and can improve numerous post-weaning welfare indicators, such as prevalence of bite injuries, levels of stress biomarkers, feed intake, and average daily gain.^{22, 23} Ensuring that the housing system permits the piglets to engage in social learning from the sow is also important, as this can help piglets transition to eating solid food.

To achieve the goal of reducing weaning stress, it is essential that PorkCARE includes a standard that explicitly sets a minimum weaning age. In addition to the psychological stress and behavioral impairments caused by maternal separation at such a young age, early weaning entails an increased risk

¹⁷ World Org. for Animal Health [OIE] Terrestrial Animal Health Code, Chapter 7.13.13 (2021). https://www.oie.int/en/what-we-do/standards/codes-and-manuals/terrestrial-code-online-access/?id=169&L=1&htmlfile=chapitre_aw_pigs.htm.

¹⁸ Federation of Veterinarians of Europe. (2019). FVE & EAPHM position on preventing tail docking and tail biting. https://www.fve.org/cms/wp-content/uploads/062_Final-EAPHM-FVE-position-on-pig-tail-docking.pdf

¹⁹ American Association of Swine Veterinarians. (2021). AASV Position Statement: Tail Docking and Teeth Clipping of Swine. <https://www.aasv.org/aasv/position-taildock-teethclip.php>

²⁰ AVMA. (n.d.) Tail docking and teeth clipping of swine. <https://www.avma.org/resources-tools/avma-policies/tail-docking-and-teeth-clipping-swine>

²¹ Jensen, & Recén, B. (1989). When to wean — Observations from free-ranging domestic pigs. *Applied Animal Behaviour Science*, 23(1), 49–60. [https://doi.org/10.1016/0168-1591\(89\)90006-3](https://doi.org/10.1016/0168-1591(89)90006-3)

²² Blavi, L., Solà-Oriol, D., Llonch, P., López-Vergé, S., Martín-Orúe, S. M., & Pérez, J. F. (2021). Management and Feeding Strategies in Early Life to Increase Piglet Performance and Welfare around Weaning: A Review. *Animals: an open access journal from MDPI*, 11(2), 302. <https://doi.org/10.3390/ani11020302>

²³ Telkänranta, H., Swan, K., Hirvonen, H., & Valros, A. (2014). Chewable materials before weaning reduce tail biting in growing pigs. *Applied Animal Behaviour Science*, 157, 14–22. <https://doi.org/10.1016/j.applanim.2014.01.004>

of infectious diseases, due to decreased development of the gastrointestinal immune system.^{24, 25} Early weaning (before 28 days of age) increases the risk of porcine reproductive and respiratory syndrome virus.²⁶ In addition, redirected suckling behaviors, such as biting and nosing other piglets, often cause pain and skin lesions to the recipient.²⁷ The increased disease and injury risk associated with weaning at a younger age causes animal welfare problems and often results in increased use of antimicrobials.

Because of the importance of setting a minimum weaning age, each of the independent third-party animal welfare certifications includes such a standard in their programs. Most of these require piglets to be at least 28 to 42 days of age.

Section SAC6. Animal Handling

Recommended standard SAC6d: “The operation uses only approved handling aids to drive or process pigs. Electric prods are not routinely carried by stockkeepers and their use is prohibited except as a last resort when human and/or animal safety is in jeopardy. If used, the electric prod can touch only the muscles of the pig’s hindquarters and can be applied for no longer than two seconds. Electric prods should never be used on pigs less than 60 days of age. Examples of approved driving aids include paddles, sorting sticks, sorting boards, flags, etc.”

Rationale for recommended standard: Humane handling is essential to ensuring animal welfare. Unfortunately, using electric prods to move pigs is highly stressful for pigs, has a negative impact on animal welfare, and increases problems such as backing-up, slipping, falling, jumping, and high-pitched vocalization.²⁸ Pigs handled with an electric prod have higher heart rates and stress indicators, such as cortisol and lactate blood concentrations. Today, the consensus among animal scientists such as Dr. Temple Grandin is that, if regular use of an electric prod is needed, this is an indicator that handling facilities are inadequate in some way and should be modified.²⁹

In line with this, all the independent third-party animal welfare certification programs ban the use of electric prods except as a last resort when injury to humans or other animals is imminent.

Assuming Pork-CARES adopts this recommendation for standard SAC6d, SAC12d will also need to be edited.

²⁴ World Org. for Animal Health [OIE] Terrestrial Animal Health Code, Chapter 7.13.20 (2021).

²⁵ Poletto, R., Steibel, J. P., Siegford, J. M., & Zanella, A. J. (2006). Effects of early weaning and social isolation on the expression of glucocorticoid and mineralocorticoid receptor and 11beta-hydroxysteroid dehydrogenase 1 and 2 mRNAs in the frontal cortex and hippocampus of piglets. *Brain research*, 1067(1), 36–42. <https://doi.org/10.1016/j.brainres.2005.10.001>

²⁶ Velasova, M., Alarcon, P., Williamson, S., & Wieland, B. (2012). Risk factors for porcine reproductive and respiratory syndrome virus infection and resulting challenges for effective disease surveillance. *BMC veterinary research*, 8, 184. <https://doi.org/10.1186/1746-6148-8-184>

²⁷ Albernaz-Gonçalves, R., Olmos Antillón, G., & Hötzel, M. J. (2022). Linking Animal Welfare and Antibiotic Use in Pig Farming—A Review. *Animals: an open access journal from MDPI*, 12(2), 216. <https://doi.org/10.3390/ani12020216>

²⁸ Faucitano, L. & Goumon, S. (2018). Transport of pigs to slaughter and associated handling. In M. Spinka (Ed), *Advances in Pig Welfare* (261-293). Elsevier, Ltd.

²⁹ Garcia, A., Johnson, A.K., Ritter, M.J., Calvo-Lorenzo, M.S., & McGlone, J.J. (2019). Transport of Market Pigs: Improvements in Welfare and Economic. In T. Grandin (Ed.), *Livestock Handling and Transport* (5th ed., pp. 328-346). CAB International.

Section SAC10. Euthanasia

Recommended standard SAC10g: “The operation maintains the equipment and supplies necessary to ensure than emergency depopulation can be carried out in a humane manner. If emergency depopulation is necessary, the operation must utilize a method classified as “preferred” in the most recent edition of the AVMA’s *Guidelines for the Depopulation of Animals* unless directed otherwise by the USDA or State Veterinarian. Depopulation must only be used when required to control animal disease outbreaks or to alleviate severe animal suffering. The operation must have plans in place to avoid the use of depopulation in response to supply chain disruption.”

Rationale for recommended standard: When depopulations are undertaken, they are typically in response to urgent circumstances. The current issue of the American Veterinary Medical Association’s *Guidelines for the Depopulation of Animals* discusses that deaths during depopulation will not always be humane, but that as much consideration is “given to the welfare of the animals as practicable.”³⁰ The level of preparedness of the producer largely determines how much suffering animals will experience during a depopulation.^{31, 32} Thus, the *Guidelines* emphasize that “proper planning and preparation are important ethical duties that should occur beforehand.”

The *Guidelines* classify depopulation methods as “preferred,” “permitted in constrained circumstances,” and “not recommended.” The methods in the latter two categories cause severe and/or protracted suffering prior to animals losing consciousness, and may not result in 100% mortality. Therefore, to safeguard animal welfare, it is crucial that all operations plan and prepare in advance so that they are able to utilize a “preferred” method in the event a depopulation became necessary.

Section SAC11. Facilities & Housing Areas

This section of the standards, Facilities and Housing Areas, is especially important since animal welfare depends to a great extent on the animals’ physical and social environments. Under natural conditions, pigs spend approximately 75% of the day engaged in foraging. Ethological research has shown that pigs possess advanced levels of cognition and emotion, similar to levels seen in dogs and chimpanzees,³³ making it all the more important that the welfare needs arising from these capacities are met.

We have identified several deficiencies in this section and recommend additional standards to ensure PorkCARE can meet its stated goals of ensuring pigs are able to express natural behaviors and are free from discomfort and distress. In addition, we recommend some modifications to existing standards to help align them with the level of animal welfare consumers expect from a certification program.

³⁰ Leary, S., Anthony, R., Gwaltney-Brant, S., et al. (2019). *AVMA guidelines for the depopulation of animals: 2019 edition*. Schaumburg, Ill: AVMA. <https://www.avma.org/sites/default/files/resources/AVMA-Guidelines-for-the-Depopulation-of-Animals.pdf>

³¹ Baysinger, A., Senn, M., Gebhardt, J., Rademacher, C., & Pairis-Garcia, M. (2021). A case study of ventilation shutdown with the addition of high temperature and humidity for depopulation of pigs. *Journal of the American Veterinary Medical Association*, 259(4), 415–424. <https://doi.org/10.2460/javma.259.4.415>

³² Grandin, T. (2021). Methods to Prevent Future Severe Animal Welfare Problems Caused by COVID-19 in the Pork Industry. *Animals: an open access journal from MDPI*, 11(3), 830. <https://doi.org/10.3390/ani11030830>

³³ Marino, L. & Colvin, C.M. (2015). Thinking Pigs: A Comparative Review of Cognition, Emotion, and Personality in *Sus domesticus*. *International Journal of Comparative Psychology*, 28(1), Article 23859. <https://escholarship.org/uc/item/8sx4s79c>

Recommended Standard A: “Throughout their reproductive cycle, sows must be housed in groups or in individual pens that are large enough to permit them to adopt all lying positions and turn around 360° without touching the sides of the enclosure. Prior to parturition, sows must be provided with sufficient nesting material. Pens that individually house breeding boars must also provide this amount of space.”

Rationale for recommended standard A: Ensuring the welfare of breeding animals is essential for any facility that takes animal welfare seriously. To ensure housing for breeding animals meets minimal animal welfare standards, it is important to consider the natural behavior and cognitive complexity of the species. In a natural state, pigs form small herds consisting of two to four related adult females and their most recent litters.³⁴ As litters mature, subadult females and males form separate groups, with adult males eventually becoming solitary.

One to two days prior to giving birth, a sow will typically separate from the group to find a suitable nest-site that offers safety from predators, weather conditions, etc.³⁵ Here, the sow will dig and root extensively to create a concave depression. Then, she will then gather branches, grass, and leaves to build a very complex nest. Following farrowing, the sow spends up to 90% of her time quietly lying in the nest, but does leave to forage and to urinate and defecate to avoid soiling the nest. After about two weeks, the sow and her piglets rejoin the social group.

Information obtained from studying both wild relatives of modern pigs and modern domesticated pigs placed in natural environments shows that behavioral characteristics developed during their evolutionary history have persisted in spite of intense artificial selection by people.³⁶ This is especially true for behaviors like nest building, which are strongly correlated with hormone levels during the end of pregnancy.

Because of these strongly motivated behaviors, confining sows to crates during gestation and lactation, as would be permitted under the draft PorkCARE standards, causes serious sow welfare problems. The individual crates or stalls in which sows are often confined are essentially designed to provide only the minimum space required for the sow to stand up and lie down.³⁷ Both gestation crates and farrowing crates restrict sow movement to such a degree that they cannot walk or turn around, and may need to lie with their head in the feeder. The dimensions of a typical gestation crate, 6.5 ft. long by 2 to 2.5 ft. wide, are the product of designing them to fit only the *static* space requirement of the sow, the amount of space used by the sow when she is standing or lying stationary, which is significantly smaller in both dimensions than the *dynamic* space requirement, or the amount of space needed to change posture normally from standing to lying and vice versa. This leads to physical discomfort as well as problems such as reduced muscle and bone strength.³⁸ Gestation crates also prevent natural behaviors such as foraging, social contact, and thermoregulation.

Similar welfare problems are seen with farrowing crates, into which the sow is typically transferred shortly before giving birth. Sows are unable to isolate, select a nest site, build a nest, or leave the

³⁴ Marchant-Forde, J. (2009). Welfare of Dry Sows. In J. Marchant-Ford (Ed), *The welfare of pigs* (95-140). Springer.

³⁵ Baxter, E.M., Andersen, I.L., & Edwards, S.A. (2018). Sow welfare in the farrowing crate and alternatives. In M. Spinka (Ed), *Advances in Pig Welfare* (28-72). Elsevier, Ltd.

³⁶ *Id.*

³⁷ Marchant-Forde, J., *supra* note 34.

³⁸ Pedersen, L.J. (2018). Overview of commercial pig production systems and their main welfare challenges. In M. Spinka (Ed), *Advances in Pig Welfare* (3-25). Elsevier, Ltd.

farrowing area to urinate and defecate.³⁹ Sows are not able to interact with their piglets aside from nursing them. Confined in farrowing crates, sows continually show restlessness, frequent changes in body position, grunts, teeth grinding, and biting of bars and other parts of the crates.⁴⁰ Prolonged lying in one position leads to development of decubital ulcers.⁴¹ Unsurprisingly, sows confined in such a manner exhibit a chronic stress response and abnormal and stereotypic behaviors.^{42, 43}

Although decreasing the pre-weaning piglet mortality rate is the justification typically given for use of gestation and farrowing crates, not all research supports this claim. Some research has found identical rates of preweaning mortality in litters from sows in farrowing crates compared to those in pens that permit movement.⁴⁴ Piglets from the larger pens also gained weight faster and exhibited less ear and tail biting. Piglets born to sows who were kept in gestation crates during pregnancy have higher cortisol levels and other markers of physiologic stress during the three weeks after birth compared to those whose mothers were kept in free-movement housing.⁴⁵ In addition, providing a larger area for movement permits a more gradual weaning process, which has been shown to improve the welfare for piglets by decreasing stress levels, decreasing aggression and injuries, and reducing the post-weaning decline in growth rate.⁴⁶

Because of the welfare problems associated with crate confinement of sows, many producers are shifting toward group housing of sows during the gestation period and either social housing or use of a large pen during the lactation period. The United Kingdom, Switzerland, Sweden, Norway, Finland, and South Korea all have bans on gestation crates, and the EU, New Zealand, Australia, and Canada all have partial bans.^{47, 48} In addition, the following states have passed measures to ban gestation crates: Arizona, California, Colorado, Florida, Maine, Massachusetts, Michigan, Ohio, Oregon, and Rhode Island.⁴⁹ Several countries also have bans on farrowing crates (Sweden, Norway, and Switzerland).⁵⁰

³⁹ *Id.*

⁴⁰ Albernaz- Gonçalves, R., *supra* note 27.

⁴¹ Johnson, A.K. & Marchant-Forde, J.N. (2009). Welfare of Pigs in the Farrowing Environment. In J. Marchant-Ford (Ed), *The welfare of pigs* (141-188). Springer.

⁴² Pedersen, L.J., *supra* note 38.

⁴³ Albernaz- Gonçalves, R., *supra* note 27.

⁴⁴ Kinane, O., Butler, F., & O'Driscoll, K. (2021). Freedom to Grow: Improving Sow Welfare also Benefits Piglets. *Animals: an open access journal from MDPI*, 11(4), 1181. <https://doi.org/10.3390/ani11041181>

⁴⁵ Kulok, M., Wojtas, K., Ciorga, M., Pejsak, Z., & Kołacz, R. (2021). The effects of lack of movement in sows during pregnancy period on cortisol, acute phase proteins and lymphocytes proliferation level in piglets in early postnatal period. *Polish journal of veterinary sciences*, 24(1), 85–92. <https://doi.org/10.24425/pjvs.2021.136796>

⁴⁶ De Ruyter, E.M., van Wetter, W. H. E. J., Lines, D. S., & Plush, K. J. (2017). Gradually reducing sow contact in lactation is beneficial for piglet welfare around weaning. *Applied Animal Behaviour Science*, 193, 43–50.

<https://doi.org/10.1016/j.applanim.2017.03.011>

⁴⁷ Baxter, E.M., *supra* note 35.

⁴⁸ Min, Y., Choi, Y., Kim, J., Kim, D., Jeong, Y., Kim, Y., Song, M., & Jung, H. (2020). Comparison of the Productivity of Primiparous Sows Housed in Individual Stalls and Group Housing Systems. *Animals: an open access journal from MDPI*, 10(11), 1940. <https://doi.org/10.3390/ani10111940>

⁴⁹ Animal Welfare Inst., *Farm Animal Anti-Confinement Legislation*, <https://awionline.org/content/farm-animal-anti-confinement-legislation>.

⁵⁰ Pedersen, L.J., *supra* note 38.

Sweden, where group housing has been mandated for all sows since 1988, reports that they are able to maintain competitive reproductive performance and productivity.⁵¹

Because of the severe negative welfare impacts of gestation crates, their use is banned by all four independent third-party animal welfare certification programs. At a minimum, these require that, unless medically indicated, boars and gestating sows be able to turn around and lie down without difficulty. Most of these programs also prohibit the use of farrowing crates, set strict minimum space allowances for sows and boars, and require the provision of nesting material such as straw.

Assuming that the PorkCARE standards are modified to accept these recommends, standard SAC11d will need to be altered to remove reference to gestation stalls and farrowing crates.

Recommended standard B: “At least 75% of the floor must be solid and no more than 25% may be slatted. Lying areas must be bedded at all times with clean, dry, mold-free bedding sufficient to avoid discomfort.”

Rationale for recommended standard B: Barren, slatted floors are detrimental to pig welfare. Scientific studies have shown that this type of flooring can result in myriad detrimental animal welfare problems, including increased prevalence of urinary tract infections, infertility, lameness, and sedentary behavior. Slatted floors are also problematic because they often preclude the use of environmental enrichment, as is necessary for tail biting management and to ensure pigs can express natural behaviors (see below).⁵² Provision of straw, a common bedding material, has been identified as one of the most crucial measures to reduce the risk of tail-biting.⁵³

The majority of animal welfare certifications recognize the many welfare benefits of providing pigs with solid flooring and ample bedding material. Certified Humane requires bedding for piglets, growing pigs, and sows both indoors year-round and outdoors during the winter, while Global Animal Partnership and Certified Animal Welfare Approved require bedding for pigs at all times.

Recommended standard SAC11j: “Pigs should have enough space and the necessary enrichment to express natural behaviors. Examples include resting, lying, standing, eating, rooting, foraging, walking, running, etc. Pigs who do not have access to natural substrate should be provided with alternating and regularly replenished environment enrichment objects.”

Rationale for recommended standard: In pigs, the strong behavioral drive for exploratory and foraging behavior has been highly conserved during evolution and highly preserved during domestication. As such, it is widely recognized that the ability to express natural behaviors is a crucial component to

⁵¹ Einarsson, S., Sjunnesson, Y., Hultén, F., Eliasson-Selling, L., Dalin, A. M., Lundeheim, N., & Magnusson, U. (2014). A 25 years experience of group-housed sows-reproduction in animal welfare-friendly systems. *Acta veterinaria Scandinavica*, 56(1), 37. <https://doi.org/10.1186/1751-0147-56-37>

⁵² European Food Safety Authority (EFSA). (2007). Scientific Report on animal health and welfare in fattening pigs in relation to housing and husbandry. *The EFSA Journal*, 564, 1-100. https://www.porcat.org/download/071018_report_efsa.pdf

⁵³ Niemi, J. K., Edwards, S. A., Papanastasiou, D. K., Piette, D., Stygar, A. H., Wallenbeck, A., & Valros, A. (2021). Cost-Effectiveness Analysis of Seven Measures to Reduce Tail Biting Lesions in Fattening Pigs. *Frontiers in veterinary science*, 8, 682330. <https://doi.org/10.3389/fvets.2021.682330>

ensuing the welfare of these animals, and including a standard articulating this is a good start. However, as written, this standard is vague and fails to meaningfully surpass standard industry practice.

Research has shown that, under the rearing conditions typical of the U.S. pork industry, pigs lack the opportunity to engage in exploratory behavior, leading to increased incidents of aggression, cannibalism, tail biting, and stereotypies.⁵⁴ The OIE, numerous veterinary organizations, and all legitimate third-party animal welfare certification programs require the provision of environmental enrichment, and it is mandated by law in some countries.^{55, 56, 57, 58} Some certification programs require outdoor access to permit pigs to root in a natural environment, and those that permit full-time indoor housing specifically require that material for rooting and objects for manipulation be provided. In contrast, while the draft PorkCARE standard mentions pigs' need to root, it fails to describe what must be provided to ensure rooting is possible.

Note: The ability of pigs to carry out natural behaviors such as foraging, walking, and running will also be influenced by standard SAC11k.

Recommended standard SAC11k: “Stocking density in pens is appropriate so that total floor space is no less than 1.5 times the lying area, calculated as the amount of space needed for all pigs to lie down at the same time.”

Rationale for recommended standard: As written, the current standard unfortunately ensures that pigs raised by producers adhering to the minimum standard will always be lying in their own excrement. Despite myths to the contrary, pigs avoid contact with their own feces and, if permitted, will leave their nesting and resting areas to urinate and defecate. This strong behavioral drive and welfare concern is recognized by the OIE, which mandates that pigs be provided with enough space to enable animals to have access to separate lying and elimination areas.⁵⁹ In addition, higher stocking densities are associated with increased risk of injurious behavior, such as tail- and ear-biting, and numerous health problems, including gastrointestinal and respiratory disease, clinical leg weakness, and claw disorders.^{60,}
⁶¹

Similarly, all legitimate third-party animal welfare certification programs require floor space be at least 1.5 times the lying area and/or provide minimum square footage requirements for pigs of different ages.

⁵⁴ Godyń, D., Nowicki, J., & Herbut, P. (2019). Effects of Environmental Enrichment on Pig Welfare—A Review. *Animals: an open access journal from MDPI*, 9(6), 383. <https://doi.org/10.3390/ani9060383>

⁵⁵ World Org. for Animal Health [OIE] Terrestrial Animal Health Code, Chapter 7.13.20 (2021).

⁵⁶ Veterinary Ireland. (2017). Position Statement on the Welfare of Pigs Kept in Intensive Systems. http://www.veterinaryireland.ie/images/Veterinary_Ireland_Position_Statement_on_the_Welfare_of_Pigs_Kept_in_Intensive_Systems_2017.pdf

⁵⁷ Federation of Veterinarians of Europe. (2019). FVE & EAPHM position on preventing tail docking and tail biting. https://www.fve.org/cms/wp-content/uploads/062_Final-EAPHM-FVE-position-on-pig-tail-docking.pdf

⁵⁸ Council Directive 2008/120, ch. II.C. (EC) <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008L0120>.

⁵⁹ World Org. for Animal Health [OIE] Terrestrial Animal Health Code, Chapter 7.13.13 (2021).

⁶⁰ Niemi, J. K., *supra* note 53.

⁶¹ Boyle, L. A., Edwards, S. A., Bolhuis, J. E., Pol, F., Šemrov, M. Z., Schütze, S., Nordgreen, J., Bozakova, N., Sossidou, E. N., & Valros, A. (2022). The Evidence for a Causal Link Between Disease and Damaging Behavior in Pigs. *Frontiers in veterinary science*, 8, 771682. <https://doi.org/10.3389/fvets.2021.771682>

Section SAC12. Pig Handling & Transport

Recommended standard SAC12j: “Maximum transport time shall be no longer than 8 hours.”

Rationale for recommended standard: Research indicates that transport is one of the most stressful events that pigs raised for meat endure in their lifetimes, and long journey times increase the risk that pigs experience poor welfare.

Pigs are typically deprived of food and water during transport and for up to 18 hours prior to departure, which leads to hunger, thirst, dehydration, and negative energy balance on prolonged journeys.^{62, 63, 64} This also leads to frustration at their lack of control over meeting basic bodily needs, causes aggression, and makes pigs more difficult to handle, which can lead to injuries.^{65, 66, 67} In fact, studies have found increased incidence of bruising on longer journeys (24 hours versus 8-16 hours).⁶⁸

As their energy reserves are depleted due to prolonged fasting, pigs become less able to respond to cold temperatures and may also become unable to maintain the constant muscular activity needed to maintain balance on the transport vehicle.⁶⁹ Dehydrated animals are also less able to handle heat stress and thus more prone to heat stroke. Pigs who have been fattened for slaughter are particularly sensitive to high temperatures.⁷⁰ On long distance journeys, animals are more likely to experience temperature fluctuations and extreme temperatures due to passing through diverse climatic regions.

Long journeys also cause worsening fatigue and exhaustion. Pigs are often unable to rest on transport trucks. Depending on loading densities, they may be unable to lie down.⁷¹ Even when lying is possible, the constant need to maintain balance and adjust their position and the vibrations and noise of travel

⁶² Faucitano, L., *supra* note 28.

⁶³ Schwartzkopf-Genswein, K. S., Faucitano, L., Dadgar, S., *et al.* (2012). Road transport of cattle, swine and poultry in North America and its impact on animal welfare, carcass and meat quality: a review. *Meat science*, 92(3), 227–243.

⁶⁴ EFSA Panel on Animal Health and Welfare (AHAW). (2011). Scientific Opinion concerning the welfare of animals during transport. *EFSA Journal*, 9(1):1966.

⁶⁵ Broom, D.M. (2019) Welfare of Transported Animals: Welfare Assessment and Factors Affecting Welfare. In T. Grandin (Ed.), *Livestock Handling and Transport* (5th ed., pp. 12-29). CAB International.

⁶⁶ Driessen, B., Freson, L., & Buyse, J. (2020). Fasting Finisher Pigs before Slaughter Influences Pork Safety, Pork Quality and Animal Welfare. *Animals: an open access journal from MDPI*, 10(12), 2206.

⁶⁷ Rioja-Lang, F. C., Brown, J. A., Brockhoff, E. J., *et al.* (2019). A Review of Swine Transportation Research on Priority Welfare Issues: A Canadian Perspective. *Frontiers in veterinary science*, 6, 36.

⁶⁸ Mota-Rojas, D., Becerril, M., Lemus, C., *et al.* (2006). Effects of mid-summer transport duration on pre- and post-slaughter performance and pork quality in Mexico. *Meat Science*, 73(3), 404–412.

⁶⁹ Cockram, M.S. (2007) Criteria and potential reasons for maximum journey times for farm animals destined for slaughter. *Applied Animal Behaviour Science*, 106(4). 234-243.

⁷⁰ Gerritzen, M. A., Hindle, V. A., Steinkamp, K., *et al.* (2013). The effect of reduced loading density on pig welfare during long distance transport. *Animal: an international journal of animal bioscience*, 7(11), 1849–1857.

⁷¹ Lambooy, E., & Engel, B. (1991). Transport of slaughter pigs by truck over a long distance: some aspects of loading density and ventilation. *Livestock Production Science*, 28(2), 163–174.

typically prevent pigs from resting.^{72, 73} On arrival at the slaughterhouse, evidence of severe exhaustion is far more likely to be seen on journeys lasting 24 hours compared to those lasting eight hours.⁷⁴

Finally, pigs are especially susceptible to experiencing nausea and vomiting due to motion sickness. It is more likely to be experienced by animals on longer journeys due to vehicular motion, vibration, and noise. Pigs may exhibit foaming at the mouth, chomping, retching, and vomiting.^{75, 76} In addition to behavioral indicators of nausea such as retching and vomiting, increased blood levels of lysine vasopressin (LVP), a physiological correlate of nausea in animals, have been noted in pigs undergoing transport.⁷⁷ Physical signs of motion sickness and elevated LVP levels have been documented in journeys as short as 100 to 120 minutes.^{78, 79} In one study that compared journeys of 100 minutes with journeys of 4.5 hours, pigs on the longer journey were more likely to exhibit signs of motion sickness and to have more severe motion sickness, with 26% vomiting or retching and 50% showing signs such as foaming and chomping. The limited research available suggests signs of motion sickness tend to persist for 2 to 5 hours.

Because of the inherent animal welfare challenges associated with the transport of pigs, legitimate third-party animal welfare certification programs typically set a limit of 8 to 16 hours and encourage producers to keep transport times to the absolute minimum. In addition, they also often specify the maximum amount of time food and/or water can be withheld prior to or during transport.

CARE Certified as a Misleading Marketing Claim

AWI continues to believe that the WFCF's CARE Certified program, as currently designed, is misleading to consumers. As expressed in our previous correspondence, the CARE Certified logo implies that the animals raised under the program are subject to animal care that is higher than the industry standard. Consumers have expressed a similar view of the claim "humanely raised,"⁸⁰ and the now-defunct United Egg Producers' "Animal Care Certified" logo, which was found to be misleading by both the National

⁷² Perremans, S., Randall, J.M., Allegaert, L., *et al.* (1998). Influence of vertical vibration on heart rate of pigs. *Journal of Animal Science*, 76(2), 416–420.

⁷³ Faucitano, L., *supra* note 28.

⁷⁴ Mota-Rojas, D., *supra* note 68.

⁷⁵ Santurtun, E., & Phillips, C. J. (2015). The impact of vehicle motion during transport on animal welfare. *Research in Veterinary Science*, 100, 303–308.

⁷⁶ Driessen, B., *supra* note 66.

⁷⁷ Bradshaw, R.H., Parrott, R.F., Forsling, M.L., *et al.* (1996). Stress and travel sickness in pigs: effects of road transport on plasma concentrations of cortisol, beta-endorphin and lysine vasopressin. *Animal Science*, 63(3). 507-516.

⁷⁸ *Id.*

⁷⁹ Randall, J.M. & Bradshaw, R.H. (1998). Vehicle motion and motion sickness in pigs. *Animal Science*, 66(1): 239-245.

⁸⁰ AWI has surveyed four times on the claim "humanely raised" and found that consumers overwhelmingly believe that producers should not be allowed to use the claim unless they exceed minimum industry animal care standards. Animal Welfare Inst., *Survey of Consumer Attitudes About the Claim "Humanely Raised"* (Oct. 2021) <https://awionline.org/sites/default/files/uploads/documents/survey-consumer-attitudes-claim-humanely-raised.pdf>.

Advertising Division (NAD) of Better Business Bureau (BBB) National Programs, Inc., and the U.S. Federal Trade Commission (FTC).⁸¹

As with the UEP's "Animal Care Certified" program, CARE Certified is based upon compliance with industry animal care standards, and creates a false impression to consumers that the animals used to create these products were treated to a higher standard of care. As written, the PorkCARE standards do not substantially improve upon industry standards. Consequently, consumers are likely to be misled by the use of this logo on product packaging and marketing materials.

The fact that CARE Certified capitalizes upon the ethos of other, legitimate third-party animal welfare certification programs, such as Certified Humane, American Humane Certified, Certified Animal Welfare Approved, and Global Animal Partnership, is particularly problematic, because it is not designed as a true certification tool. It does not appear that scoring criteria exist, meaning that there is no assessment of whether a facility "fails," even if key animal welfare indicators are not met, and no information is provided about the schedule or mechanism for on-farm assessments. In stark contrast to the above-listed animal welfare certification programs, it is not clear what if any consequences result from failure to meet program standards other than willful or egregious acts of abuse or neglect.

The CARE Certified program's other attributes, such as the "environmental stewardship" and "people and community" standards, also do not provide a sufficient basis for use of the logo. According to the FTC, "[t]hird-party certification does not eliminate a marketer's obligation to ensure that it has substantiation for *all claims reasonably communicated by the certification.*"⁸² The CARE Certified encircled heart logo, the program's purpose, and related marketing materials communicate a very strong animal welfare message to consumers. Even if the certification standards did substantiate the "environmental stewardship" and "people and community" attributes, marketers are responsible for "all reasonable interpretations of their claims" and must ensure that all express and implied claims are substantiated.⁸³ As written, the CARE Certified standards simply *cannot* substantiate an animal welfare interpretation of the logo.

Finally, AWI continues to find it troubling that WFCF has already allowed products to be marketed under the CARE Certified logo prior to any relevant standards being finalized. The fact that retailers are selling products with the CARE Certified logo without actual substantiation is textbook consumer deception. According to the FTC, it is deceptive to "misrepresent . . . that a product . . . has been endorsed or certified by an independent third party."⁸⁴ The WFCF website states that CARE Certified products "hit shelves" in March 2021, and AWI is aware of at least one retailer that has been marketing beef, pork, and chicken products under the certification, despite the fact that the PorkCARE standard is only just now being developed and the ChickenCARE standards have not even been drafted. To AWI's knowledge, only the BeefCare standard is complete. WFCF has an obligation, at the very least, to ensure that its logo is not used to market products to consumers for which there is no operational certification program.

⁸¹ For more detail, please see previous correspondence regarding WFCF's BeefCARE standard.

⁸² 16 C.F.R. § 260.6(c) (emphasis added).

⁸³ FTC Policy Statement on Deception, 103 FTC 174 (1983); FTC Policy Statement Regarding Advertising Substantiation, 104 FTC 839 (1984).

⁸⁴ 16 C.F.R. § 260.6(a).


Conclusion

AWI strongly supports authentic higher-welfare, sustainable auditing and marketing programs. We view these programs as benefiting animals, workers, consumers of animal-based foods, and farmers and ranchers who expend the resources required to meet consumer expectations of these products. To meet consumer expectations, these programs must be based on standards that are demonstrably higher than conventional industry guidelines. Unfortunately, the draft PorkCARE animal husbandry standards do not satisfy this requirement. To prevent consumers from being confused and misled by the CARE Certified claim, we encourage WFCF to revise the PorkCARE standards as described above.

We appreciate your serious consideration of AWI's concerns and suggestions. Please contact Erin Sutherland (erin@awionline.org) with any questions, or if you would like to schedule a meeting to discuss our recommendations.

Sincerely,

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