

# The welfare of chickens used for meat and the European Chicken Commitment

Chickens are active, social and curious animals with notable cognitive abilities and complex behavioural needs. They have a distinct vocal repertoire, with dozens of different kinds of calls. However, conventional chicken production fails to account for the complexity of these birds and causes serious welfare issues.

The science is clear: chickens raised for meat suffer greatly under conventional production methods. The European Chicken Commitment criteria aim to reduce this suffering.

#### **European Chicken Commitment (ECC)**

The ECC is a set of science-based welfare criteria agreed by animal welfare organizations worldwide to improve the lives of chickens raised for meat across Europe.

The ECC sets out minimum standards for producers and businesses that produce or sell chicken meat, aiming to address the most urgent welfare issues in chicken production. The key areas include stocking density, growth rate, daylight, perches and enrichment, air quality, cages and slaughter.

The current EU law permits overcrowding, dim lighting, barren environments and inhumane slaughter. It also allows the use of fast-growing genetic lines of chickens, who grow to market weight so quickly that they are prone to debilitating, painful skeletal disorders and walking abnormalities.<sup>1,2,3</sup> The ECC standards provide guidance for producers and businesses to better adhere to science, respond to evolving consumer sentiment and demand, and prepare for future broiler chicken welfare legislation.

#### 6.4 billion

chickens were slaughtered in the European Union in 2023.<sup>4</sup>

84%

of Europeans want better protection for farmed animals.<sup>5</sup>

10.0%

increase in retail sales of free-range and organic chicken meat in the EU between 2018-2022.<sup>6</sup>

#### How the ECC addresses it

#### **Overcrowding**

Overcrowding in commercial facilities reduces the health of the birds,<sup>7</sup> by, for example, increasing the risk of intestinal disease.<sup>8</sup> It also reduces chickens' ability to express natural behaviour, <sup>9,10</sup> and avoid disturbance.<sup>11</sup> High stocking density means more manure, which can lead to wet litter, a cause of foot pad lesions. It can also contribute to reduced walking ability, which may be the result of constrained activity and reduced mobility.<sup>12</sup>

# Stocking density limits

The ECC sets limits on stocking density, the number of birds per square meter (m<sup>2</sup>), to ensure chickens have enough space to move and express natural behaviour.

#### **Rapid growth**

Selective breeding for rapid weight gain causes severe welfare problems, including reduced mobility, <sup>13</sup> disproportionate kidney and lung size, <sup>14</sup> and muscle damage, including wooden breast syndrome and white striping. <sup>15</sup> Many chickens suffer from lameness and difficulty walking. <sup>16,17,18</sup> In most flocks, by the time they approach slaughter weight, there are birds who become so crippled that they are unable to reach feed and water.

# Higher welfare breeds

The ECC promotes the use of slower-growing, higher welfare breeds to reduce the health problems associated with rapid weight gain, improving mobility and overall welfare.

Chickens raised conventionally are bred for extremely rapid weight gain.<sup>19</sup>





#### How the ECC addresses it

#### **Dim lighting**

Lights are generally kept on at a low level for 18-20 hours a day to encourage the birds to eat more and gain weight faster. However, poor lighting disrupts sleep and the production of melatonin,<sup>20</sup> a hormone regulating growth and immune function. The short night and prolonged hours of light can worsen skeletal issues.<sup>21,22,23</sup>

#### **Improved lighting**

The ECC mandates higher light intensity, including natural daylight, to support better day and night cycles.



#### **Barren environments**

Except for feed and water lines, conventional production facilities are empty barns. The chickens are unable to express their natural curiosity or innate behaviour patterns such as perching or foraging. They have little to do but sleep or eat.

# Perches and environmental enrichment

The ECC requires that chickens have access to perches for roosting and pecking materials to create a more stimulating environment and improve their quality of life.





#### Welfare issue

#### **Poor air quality**

Crowded indoor settings can expose chickens to poor air quality due to pollutants including dust, bacteria, fungal spores and gases (carbon dioxide and ammonia), impacting respiration and health.<sup>24</sup> Excessive ammonia levels over long periods of time can reduce the growth of chickens and increase flock mortality rate.<sup>25</sup>

#### How the ECC addresses it

#### **Cleaner air**

The ECC sets standards for ventilation to maintain air quality and reduce exposure to pollutants, leading to improved air quality in the barn to support health and welfare.

#### **Cages**

The use of cages for chickens limits both floor space and height, restricting movement and preventing natural behaviour such as foraging and dustbathing. The lack of movement and exercise is so severe that it can reduce bone strength. <sup>26,27,28</sup> Broiler chickens kept for meat production are not typically reared in cages in the EU, but breeding birds (i.e., parent and grandparent generations) may be housed in cages or multitier systems where their movement is restricted, and they do not have access to litter.

#### No cages

The ECC prohibits the use of cages or multitier systems for broiler chickens. Broiler chicken cages cause severe welfare problems because chickens are so tightly crowded they barely have space to spread their wings.



#### Welfare issue

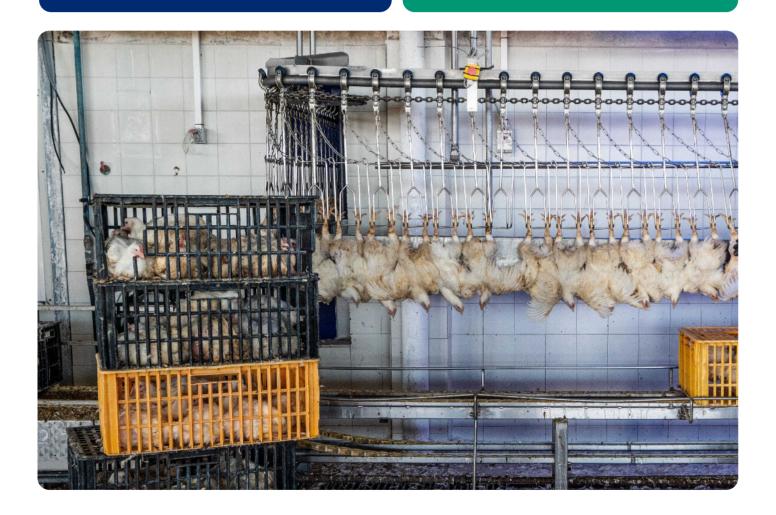
#### How the ECC addresses it

#### **Ineffective stunning**

The common electrical waterbath stunning method causes fear, stress and pain. The birds are first inverted (hung by their feet, upside down in shackles) while fully conscious. They may flap their wings to right themselves. The stunning is inconsistent, meaning that not all chickens are successfully rendered unconscious, <sup>29,30</sup> causing severe pain and distress as their throats are cut for exsanguination.

### **Improved stunning without live inversion**

The ECC requires that slaughterhouses use controlled atmosphere stunning with inert gas or multiphase systems, or effective electrical stunning without live inversion, which improve animal welfare. These practices ensure chickens are rendered unconscious before they are handled and shackled upside down on the line, reducing their suffering.



#### The Pecking Order

Since 2023, Humane World for Animals has been publishing The Pecking Order reports, evaluating the chicken welfare policies and progress of major fast-food brands in Poland and Romania. The report highlights an urgent need for Poland's and Romania's fast-food industry to accelerate its efforts to adopt higher welfare standards for chickens raised for meat—especially given growing consumer demand for more humane food production. Additionally, the report outlines actionable steps for the industry, lawmakers and consumers to drive meaningful change.



For more information, visit humaneworld.org/thepeckingorder

#### References

- <sup>1</sup> McGeown D, Danbury TC, Waterman-Pearson AE, and Kestin SC. 1999. Effect of carprofen on lameness in broiler chickens. The Veterinary Record 144:668-71.
- <sup>2</sup> Caplen G, Hothersall B, Murrell JC, et al. 2012. Kinematic analysis quantifies gait abnormalities associated with lameness in broiler chickens and identifies evolutionary gait differences. PLoS ONE 7(7):e40800.
- <sup>3</sup> Hothersall B, Caplen G, Parker RMA, et al. 2016. Effects of carprofen, meloxicam and butorphanol on broiler chickens' performance in mobility tests. Animal Welfare 25(1):55-67.
- <sup>4</sup> Food and Agriculture Organization of the UN. FAOSTAT Database. Crops and livestock products. License: CC BY-NC-SA 3.0 IGO. Extracted from:

www.fao.org/faostat/en/#data/QCL. Accessed December 20, 2024.

- <sup>5</sup> European Commission. 2023. Special Eurobarometer 533. Attitudes of Europeans towards animal welfare.
- europa.eu/eurobarometer/api/deliverable/download/file?deliverableId=88297. Accessed February 16, 2024.
- <sup>6</sup> Maia Research. 2024. Customized EU Cage Free Eggs, Cage Free Chicken Meat and Crate Free Pork Industry Market Research Report. January 2024.
- <sup>7</sup> Estevez I. 2007. Density allowances for broilers: where to set the limits? Poultry Science 86:1265-72.
- <sup>8</sup> Tsiouris V, Georgopoulou I, Batzios C, Pappaioannou N, Ducatelle R, and Fortomaris P. 2015. High stocking density as a predisposing factor for necrotic enteritis in broiler chicks. Avian Pathology 44(2):59-66.
- <sup>9</sup> Evans L, Brooks GC, Anderson MG, Campbell AM, and Jacobs L. 2023. Environmental complexity and reduced stocking density promote positive behavioral outcomes in broiler chickens. Animals 13:2074.
- <sup>10</sup> Van der Eijk JAJ , Gunnink H, Melis S, van Riel JW, and de Jong IC. 2022. Reducing stocking density benefits behaviour of fast- and slower-growing broilers. Applied Animal Behaviour Science 257:105754.
- <sup>11</sup> Evans L, Brooks GC, Anderson MG, Campbell AM, and Jacobs L. 2023. Environmental complexity and reduced stocking density promote positive behavioral outcomes in broiler chickens. Animals 13:2074.
- <sup>12</sup> Thomas D, Ravindran V, Thomas D, et al. 2004. Influence of stocking density on the performance, carcass characteristics and selected welfare indicators of broiler chickens. New Zealand Veterinary Journal 52(2):76-81.
- <sup>13</sup> Dawson LC, Widowski TM, Liu Z, Edwards AM, and Torrey S. 2021. In pursuit of a better broiler: a comparison of the inactivity, behavior, and enrichment use of fast- and slow-growing broiler chickens. Poultry Science 100:101451.
- <sup>14</sup> Rothschild D, dos Santos MN, TM Widowski, TM, et al. 2019. A comparison of organ size between conventional and slower growing broiler chickens. Presented at Poultry Science, Montreal, QC, July 2019.
- atrium.lib.uoguelph.ca/items/3e5195b9-ef84-43a6-bfef-e3aa6d270543. Accessed on September 3, 2024.
- <sup>15</sup> Santos MN, Rothschild D, Widowski TM. et al. 2021. In pursuit of a better broiler: carcass traits and muscle myopathies in conventional and slower-growing strains of broiler chickens. Poultry Science 100(9):101309.
- <sup>16</sup> Granquist EG, Vasdal G, de Jong IC, and Moe RO. 2019. Lameness and its relationship with health and production measures in broiler chickens. Animal 13(10):2365-72.
- <sup>17</sup> Wideman Jr. RF. 2016. Bacterial chondronecrosis with osteomyelitis and lameness in broilers: a review. Poultry Science 95(2):325-44.
- <sup>18</sup> Dixon LM. 2020. Slow and steady wins the race: The behaviour and welfare of commercial faster growing broiler breeds compared to a commercial slower growing breed. PLoS ONE 15(4):e0231006.
- <sup>19</sup> Zuidhof MJ, Schneider BL, Carney VL, Korver DR, and Robinson FE. 2014. Growth, efficiency, and yield of commercial broilers from 1957, 1978, and 2005. Poultry Science 93(12):2970-82.
- <sup>20</sup> Arowolo MA, He JH, He SP, and Adebowale TO. 2019. The implication of lighting programmes in intensive broiler production system. World's Poultry Science Journal 75:1-12.
- <sup>21</sup> Schwean-Lardner K, Fancher BI, Gomis S, van Kessel A, Dalal S, and Classen HL. 2013. Effect of day length on the cause of mortality, leg health and ocular health in broilers. Poultry Science 92:1-11.
- <sup>22</sup> Arowolo MA, He JH, He SP and Adebowale TO. 2019. The implication of lighting programmes in intensive broiler production system. World's Poultry Science Journal 75:1–12.
- <sup>23</sup> Schwean-Lardner K, Fancher BI, Gomis S, Van Kessel A, Dalal S, and Classen HL. 2013. Effect of day length on the cause of mortality, leg health and ocular health in broilers. Poultry Science 92:1-11.
- <sup>24</sup> The Humane Society of the United States. 2013. An HSUS Report: The Welfare of Animals in the Chicken Industry.
- <sup>25</sup> Miles DM, Branton SL, and Lott BD. 2004. Atmospheric ammonia is detrimental to the performance of modern commercial broilers. Poultry Science 83(10):1650-4.
- <sup>26</sup> Wabeck CJ and Littlefield LH. 1972. Bone strength of broilers reared in floor pens and in cages having different bottoms. Poultry Science 51:897-9.
- <sup>27</sup> Andrews LD and Goodwin TL. 1973. Performance of broilers in cages. Poultry Science 52:723-8.
- <sup>28</sup> Merkley JW. 1981. A comparison of bone strengths from broilers reared under various conditions in coops and floor pens. Poultry Science 60:98-106.
- <sup>29</sup> EFSA AHAW Panel (EFSA Panel on Animal Health and Animal Welfare), NielsenSS, Alvarez J, Bicout DJ, et al. 2019. Scientific opinion on Slaughter of animals: poultry. EFSA Journal 17(11):5849.
- <sup>30</sup> Hindle VA, Lambooij E, Reimert HGM, Workel LD, and Gerritzen MA. 2010. Animal welfare concerns during the use of the water bath for stunning broilers, hens, and ducks. Poultry Science 89(3):401-12.



