

The Suffering of 'Broiler' Chickens



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A Brief History of Broiler Chickens

Before the 1950s, chicken meat was infrequently eaten in the UK, and the same varieties of birds were bred for both meat and egg production. But, following World War Two, 'broiler' chickens were introduced from the USA for the sole purpose of being raised for meat. These birds were selectively bred to be fast growing, reaching slaughter weight much sooner than traditional chicken breeds, and their meat was considered more tender and easier to cook. The de-rationing of chickenfeed at this time also prompted a huge increase in chicken farming in the UK and growth continued over the following decades.¹

Today, more broiler chickens are reared and slaughtered in this country than any other farmed animal, apart from fish.² More than 850 million chickens are killed for their meat in the UK each year;³ that's around 27 every second.

Broiler Sheds

More than 90 per cent of all the chickens reared for meat in the UK will spend their entire lives inside a broiler shed.⁴ These huge, featureless buildings can house up to 50,000 birds at a time⁵ and have automated machines that control the amount of food and water that the chickens receive, as well as the temperature, humidity and lighting levels. With so many machines and chickens in one place, broiler sheds are extremely noisy, giving the birds little chance to rest.

Chicks are usually put into the sheds at just a day or two old, having been incubated in a hatchery. After just six weeks many of them will be slaughtered, having lived for just a tiny fraction of their natural lifespan of more than six years.⁶ They will never see their mothers or natural daylight and they will never feel the wind through their feathers or get the chance to dust bathe.

The maximum 'stocking density' (the amount of birds permitted in a given space) for intensive broiler sheds is 34kg per square metre.⁷ This amounts to about 15 birds per square metre, based on average liveweights at slaughter.⁸ In the last days of their lives, therefore, broiler shed chickens are more crowded together than caged egg-laying hens.⁹ Such high stocking densities have been proven to cause stress and to be detrimental to their welfare.¹⁰ The crowding also prevents them from exhibiting many of their natural behaviours and from interacting with one another normally. It also restricts their access to food and water.

Health Problems

Broiler chickens are selectively bred to grow abnormally quickly so that they can reach slaughter weight much sooner. Such rapid growth puts a huge strain on their bones, as they try to carry an adult's weight on a chick's skeleton. Consequent health problems include bone deformities, damage to cartilage and joints, and bone fractures, particularly in their feet and legs.¹¹ For as many as 27 per cent who experience poor mobility,¹² reaching food and water can be difficult, or even impossible. The rapid growth rate of modern broiler chickens also puts a huge strain on their hearts and lungs, leaving the birds highly susceptible to heart failure.¹³



The litter on which the chickens spend their lives often goes unchanged until the birds are taken to slaughter. Over time it becomes contaminated with droppings, which can cause burns to the feet and skin – known as hock burns. It also leads to the release of ammonia that irritates their eyes and respiratory systems, leaving the chickens more susceptible to bacterial infection.¹⁴

The warm, crowded and dirty sheds provide an environment that is highly conducive to the spread of contagious diseases¹⁵ and have been linked to the rise in both salmonella¹⁶ and avian flu.¹⁵

Broiler Breeders

The rapid growth of broiler chickens, and their huge appetites required to fuel that growth, has even greater consequences for the birds used for breeding purposes. To ensure they live long enough to reach reproductive age, the diet of breeding broilers is highly restricted so that they do not become obese and develop many of the health problems mentioned above.¹⁷ However, this often results in the birds suffering from hunger stress.¹⁸

Free range, Freedom Food and Organic

Free range chickens may only have daytime access to the outside for as little as half their lives. They often spend long periods inside

sheds where stocking densities can be as high as 13 birds per square metre,¹⁹ which is little better than standard broiler sheds. This crowding makes it difficult for many to get to the 'pop holes' that permit access to the outside. One study of 800,000 free range broiler chickens found that only 15 per cent of the birds could be found outside at any one time.²⁰

Under the Freedom Food scheme, farmers must rear slower-growing varieties of chickens, which helps to ensure the birds suffer from fewer physiological problems, and they must be exposed to natural light as much as possible. However, chickens may be kept permanently inside and have maximum stocking densities that can be just as high as conventional broiler sheds.²¹

Under EU organic regulations, it is recommended that slow-growing varieties of chicken be reared, but this is not a legal requirement. Conventional broiler varieties must not be slaughtered at less than 81 days old, meaning they live almost twice as long as intensively farmed birds, but still a far cry from their natural lifespan. There is no such minimum slaughter age for slow-growing breeds. Organic chickens must also have access to the outside, as with free range schemes, but this can be for as little as a third of their lifetime.²²

Catching, Stunning and Slaughter

In order to transport the chickens to a slaughterhouse, farmers usually employ teams of 'catchers' – who typically grab the birds by their feet and wings and thrust them into drawers or crates to be loaded on to trucks – or they may use large machines that sweep chickens up automatically. Both methods entail a high risk of stress, injury and even death to the chickens, especially being caught by hand, which has been associated with a higher rate of leg injuries, including bruising, dislocations and bone breakages.²³



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After travelling in crowded crates in the back of a truck to the slaughterhouse – which could be hundreds of miles away – the chickens are usually suspended upsidedown by the feet in metal shackles, still fully conscious. Poultry are currently the only animals who can be shackled by their feet before stunning. Given that many of the birds will have broken legs, this process causes significant pain and distress.

The most common method of stunning broiler chickens is to dip either their heads or their whole bodies into electrified water.²⁴ This should cause them to become unconscious. However, the stunning is sometimes ineffective as they are not sufficiently immersed in the water. Even the very best electrical stunning systems result in at least four per cent of chickens not being rendered fully unconscious.²⁵ Other methods of stunning, such as the use of carbon dioxide or other gases, have been shown to be more effective and require less stressful handling of the birds,²⁶ but according to a 2011 survey by the Food Standards Agency, only 13 per cent of UK slaughterhouses use gas stunning.27

Slaughter is most often carried out by an automated machine that cuts the chickens' throats.²⁶ If the machine is not properly maintained or where some birds are a different size or shape to the rest of the flock, then they may not be killed outright. The automation of stunning and slaughter is simply to allow more chickens to be killed quicker to fulfil the huge demand for meat and increase profits, not to minimise suffering for the birds.



References

1) UK Agriculture, *Broiler chickens in the UK – an introduction*, http://www.ukagriculture.com/livestock/broiler_chickens.cfm, accessed 23rd April 2013

2) RSPCA, Chickens reared for meat (broilers), http://www.rspca.org.uk/allaboutanimals/farm/poultry/ meatchickens, accessed 24th April 2013

3) Defra, Poultry and Poultry Meat Statistics, p.7, 28th March 2013

4) RSPCA, The Welfare State: Five Years Measuring Animal Welfare in the UK 2005-2009, p.57, 2011

5) RSPCA, Meat Chickens – Farming, http://www.rspca.org.uk/allaboutanimals/farm/poultry/ meatchickens/farming, accessed 24th April 2013.

6) Compassion in World Farming, Meat Chickens, https://www.ciwf.org.uk/farm_animals/poultry/meat_chickens/ default.aspx, accessed 3rd May 2013.

7) Defra, Meat Chickens & Breeding Chickens: Code of Recommendations for the Welfare of Livestock (PB7275), 2002.

8) Defra, Poultry and Poultry Meat Statistics, p.9, 28th March 2013

9) Defra, Laying Hens (England): Code of Recommendations for the Welfare of Livestock (PB7274), 2002.

10) Abudabos, Samara, Hussein, Al-Ghadi & Al-Atiyat, *Impacts* of stocking density on the performance and welfare of broiler chickens. Italian Journal of Animal Science, volume 12:e11, 17th February 2013.

11) M. Gentle, *Comparative Vertebrate Nociception and Pain*, International Veterinary Information Service, 3rd December 2002.

12) Knowles, Kestin, Haslam, Brown, Green, Butterworth, Pope, Pfeiffer & Nicol, *Leg Disorders in Broiler Chickens: Prevalence, Risk Factors and Prevention,* Plos One, 6th February 2008.

13) Olkowski, Pathophysiology of heart failure in broiler chickens: structural, biochemical, and molecular characteristics, Poultry Science, 86, p.999-1005, May 2007.

14) Pokharel, Ammonia Emission from Poultry Industry, its Effects and Mitigation Mechanism, International Veterinary Students Association's Newsletter, December 2010.

15) Compassion in World Farming, *The roles of the intensive* poultry production industry in the spread of avian influenza, February 2007.

16) The Telegraph, One in four chicken flocks has salmonella, 4th April 2007.

17) Richards, Rosebrough, Coon & McMurtry, Feed intake regulation for the female broiler breeder: In theory and in practice, The Journal of Applied Poultry Research, volume 19, number 2, p.182-193, June 2010.

18) Decuypere, Bruggeman, Everaert, Li, Boonen, De Tavernier, Janssens & Buys, *The broiler breeder paradox: ethical, genetic and physiological perspectives, and suggestions for solutions,* British Poultry Science, volume 51, issue 5, p.569-579, October 2010.

19) European Commission, Commission Regulation (EEC) No. 1538/91 of 5 June 1991 introducing detailed rules for implementing Regulation (EEC) No. 1906/90 on certain marketing standards for poultrymeat, Official Journal, 7th June 1991.

20) Dawkins, Cook, Whittingham, Mansell & Harper, What makes free-range boiler chickens range? In situ measurement of habitat preference, Animal Behaviour, volume 66, issue 1, p.151-160, July 2003.

21) RSPCA, RSPCA welfare standards for chickens, April 2011.

22) European Union, *Commission Regulation (EC) No. 889/2008 of 5 September 2008, Official Journal of the European Union, 18th September 2008.*

23) Knierim & Gocke, Effect of catching broilers by hand or machine on rates of injuries and dead-on-arrivals, Animal Welfare, volume 12, number 1, p.63-73(11), February 2003.

24) Raj, Recent developments in stunning and slaughter of poultry, World Poultry Science Journal, Volume 62, Issue 3, p.467-484, September 2006.

25) European Commission, *Scientific opinion on the electrical requirements for waterbath stunning equipment applicable for poultry*, European Food Safety Authority Journal, 10(6), 14th June 2012.

26) Ulrich Löhren, Overview on current practices of poultry slaughtering and poultry meat inspection, European Food Safety Authority, Supporting Publications 2012:EN-298, 29th June 2012.

27) Food Standards Agency, Results of the 2011 FSA animal welfare survey in Great Britain – Annex B, September 2011.

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