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# Code of Recommendations for the Welfare of Livestock: Meat Chickens and Breeding Chickens

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# Code of Recommendations for the Welfare of Livestock: Meat Chickens and Breeding Chickens

## Contents

Preface	Pages 3 - 5
Introduction	Pages 8 - 10
Recommendations applying to all systems	Pages 11 – 29
<ul style="list-style-type: none"><li>- <b>Stockmanship &amp; Staffing – Including catching</b></li><li>- <b>Feed and Water</b></li><li>- <b>Health</b></li><li>- <b>Mutilations</b></li><li>- <b>Buildings and Accommodation</b></li><li>- <b>Freedom of Movement</b></li><li>- <b>Automatic or Mechanical Equipment</b></li></ul>	
Additional recommendations for free range systems	Pages 30
Record keeping	Pages 31
Contingency Planning	Pages 32
Additional recommendations for breeding chickens	Pages 33 - 37
<ul style="list-style-type: none"><li>- <b>Feed and Water</b></li><li>- <b>Mutilations</b></li><li>- <b>Buildings and Accommodation</b></li><li>- <b>Breeding Procedures</b></li></ul>	

- **Disposal of surplus chicks and embryos in hatchery waste**

## Annex - Other Legislation Affecting Meat Chickens

Page 38

### **Preface**

This preface is not part of the Code but is intended to explain its purpose and to indicate the broad considerations upon which it is based. Similarly, the legislation quoted in boxes throughout the document is not part of the Code but is intended to highlight some of the legal requirements. The law, as quoted in these boxes, is that in force on the date of publication or reprinting of the Code (please turn to the back cover for this information). Readers should be aware that any of the legal requirements quoted might be subject to change – they should seek confirmation before assuming that these are an accurate statement of the law currently in force.

In addition, the Annex which highlights other legislation affecting meat chickens is not part of the Code.

The purpose of the code is to provide practical guidance in relation to the provisions in the Welfare of Farmed Animals(England) Regulations 2007 (as amended), the Mutilations (Permitted Procedures)(England) Regulations 2007 in relation to the welfare of meat and breeding chickens. Parts of the Animal Welfare Act 2007 may also be relevant, for example s9 of the Animal Welfare Act which requires the needs of an animal to be met and s4 which makes it an offence to cause unnecessary suffering.

Regulation 6 of the Welfare of Farmed Animals (England) Regulations 2007 as amended) (S.I. 2007 No. 2078) provides that:

A person responsible for a farmed animal–

- (a) must not attend to the animal unless he is acquainted with any relevant code of practice and has access to the code while attending to the animal; and
- (b) must take all reasonable steps to ensure that a person employed or engaged by him does not attend to the animal unless that other person–
  - (i) is acquainted with any relevant code of practice;
  - (ii) has access to the code while attending to the animal; and
  - (iii) has received instruction and guidance on the code.

In this section a “relevant code of practice” means a code of practice issued under section 14 of the Animal Welfare Act 2006 or a statutory welfare code issued under section 3 of the Agriculture (Miscellaneous Provisions) Act 1968 relating to the particular species of farmed animal to which a person is attending.

Section 14 of the Animal Welfare Act 2006 provides the power to issue statutory codes, stating that:

1. The appropriate national authority may issue, and may from time to time revise, codes of practice for the purpose of providing practical guidance in respect of any provision made by or under this Act.
3. A person’s failure to comply with a provision of a code of practice issued under this section shall not of itself render him liable to proceedings of any kind.
4. In any proceedings against a person for an offence under this Act or an offence under regulations under section 12 or 13-
  - (a) failure to comply with a relevant provision of a code of practice issued under this section may be relied upon as tending to establish liability, and
  - (b) compliance with a relevant provision of such a code of practice may be relied upon as tending to negative liability.

To cause unnecessary suffering to a protected animal (which includes an animal under the control of man) is an offence under section 4 of the Animal Welfare Act 2006.

Section 9(1) of the Animal Welfare Act 2006 states that:

A person commits an offence if he does not take such steps as are reasonable in all the circumstances to ensure that the needs of an animal for which he is responsible are met to the extent required by good practice.

Section 9(2) states that:

For the purposes of this Act, an animal’s needs shall be taken to include-

- (a) its need for a suitable environment,
- (b) its need for a suitable diet,
- (c) its need to be able to exhibit normal behaviour patterns,
- (d) any need it has to be housed with, or apart from, other animals, and
- (e) its need to be protected from pain, suffering, injury and disease.

Section 10 of the Animal Welfare Act 2006 states that:

If an inspector is of the opinion that a person is failing to comply with section 9(1), he may serve on the person a notice which –

- (a) states that he is of that opinion,
  - (b) specifies the respects in which he considers the person is failing to comply with that provision,
  - (c) specifies the steps he considers need to be taken in order to comply with the provision,
  - (d) specifies a period for the taking of those steps, and
  - (e) explains the effect of subsections (2) and (3).
- (1) Where a notice under subsection (1) (“an improvement notice”) is served, no proceedings for an offence under section 9(1) may be instituted before
- (2) the end of the period specified for the purposes of subsection (1)(d) (“the compliance period”) in respect of –
- (a) the non-compliance which gave rise to the notice, or
  - (b) any continuation of that non-compliance.
- (3) If the steps specified in an improvement notice are taken at any time before the end of the compliance period, no proceedings for an offence under section 9(1) may be instituted in respect of –
- (a) the non-compliance which gave rise to the notice, or
  - (b) any continuation of that non-compliance prior to the taking of the steps specified in the notice.
- (4) An inspector may extend, or further extend, the compliance period specified in an improvement notice.

Regulation 4 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) states that:

- (1) A person responsible for a farmed animal must take all reasonable steps to ensure that the conditions under which it is bred or kept comply with Schedule 1.
- (2) In complying with the duty in paragraph (1), a person responsible for a farmed animal must have regard to its–
- (a) species;
  - (b) degree of development;
  - (c) adaptation and domestication; and
  - (d) physiological and ethological needs in accordance with good practice and scientific knowledge.

Regulation 5 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended), states that persons responsible for conventionally reared meat chickens must comply with Part 2 of Schedule 10. Conventionally reared meat chickens are defined as chickens kept for meat production except for those that—

- (a) are on holdings with fewer than 500 meat chickens or with only breeding stocks of chickens;
- (b) are on hatcheries;

(c) to which the term “Extensive indoor (barn reared)”, “Free range”, “Traditional free range” or “Free range – total freedom” may be used within the meaning of Annex V to Commission Regulation (EC) No 543/2008 laying down detailed rules for the application of Council Regulation (EC) No 1234/2007 as regards the marketing standards for poultrymeat; or  
d) are organically reared in accordance with Council Regulation (EC) No 834/2007 on organic production and labelling of agricultural products and repealing Regulation (EEC) No 2092/91.

The Code is intended to encourage all those who care for farm animals to adopt high standards of husbandry. Without good stockmanship, animal welfare can never be adequately protected. Adherence to these recommendations will help flock-keepers to reach the required standard.

The welfare of meat chickens and breeding chickens is considered within a framework, elaborated by the Farm Animal Welfare Council, and known as the “Five Freedoms”. These form a logical basis for the assessment of welfare within any system together with the actions necessary to safeguard welfare within the constraints of an efficient livestock industry.

### **The Five Freedoms are:**

1. Freedom from Hunger and Thirst – by ready access to fresh water and a diet to maintain full health and vigour;
2. Freedom from Discomfort – by providing an appropriate environment including shelter and a comfortable resting area;
3. Freedom from Pain, Injury or Disease – by prevention or rapid diagnosis and treatment;
4. Freedom to Express Normal Behaviour – by providing sufficient space, proper facilities and company of the animals’ own kind; and
5. Freedom from Fear and Distress – by ensuring conditions and treatment to avoid mental suffering.

In acknowledging these freedoms, those who have care of livestock should practise:

- Caring and responsible planning and management;
- Skilled, knowledgeable and conscientious stockmanship;
- Appropriate environmental design (for example, of the husbandry system);
- Considerate handling and transport; and
- Humane slaughter.

### **Enforcement powers**

- a) powers of inspection: Section 28 of the Animal Welfare Act 2006 provides powers to inspectors to make inspections to check compliance with regulations under section 12 which relate to animals bred or kept for farming purposes and to ascertain whether any offence under or by virtue of the Act has been committed in relation to such animals. Section 29 provides further powers to inspectors to make inspections in order to check compliance with regulations under section 12 which implement a Community obligation.
- b) Prosecutions: Regulation 8 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) provides powers for local authority to prosecute proceedings for an offence under those regulations, although any person can under common law launch private prosecutions and the Act does not limit this right.
- c) Penalties: Regulation 9 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) states that a person guilty of an offence under the regulations is liable on summary conviction to imprisonment for a term not exceeding 51 weeks (or 6 months before the commencement of section 281(5) of the Criminal Justice Act 2003) or a fine not exceeding level 4 on the standard scale or both of these.

This Code is made under powers conferred by s14 of the Animal Welfare Act 2006 applies in England only and has been issued under s15 of that Act by the Secretary of State for Environment, Food and Rural Affairs. It replaces (also as regards England only) the Code of Recommendations for the Welfare of Livestock: Meat Chickens and Breeding Chickens (issued 22 July 2002).

## Introduction

1. This Code (which applies in England only) covers all parts of the meat chicken production sector, including breeding birds and grandparent stock under all types of husbandry systems.

2. Legal text in the boxes has been colour coded to reflect the welfare requirements for all meat chicken producers (blue) and the additional welfare requirements with which producers of conventionally reared meat chickens must comply (red) as required by Council Directive 2007/43. These are producers other than those with less than 500 birds, breeding chickens, hatcheries, extensive indoor, free range or organic birds. However, although not a legal requirement, the additional welfare provisions for conventionally reared meat chickens demonstrate best practice and science which can be applied to all systems of production to ensure that the welfare of all birds is safeguarded

3. For ease of reference, the table below summarises the various legal provisions relating to animal welfare on farm for different types of meat chicken production systems.

Type of meat chicken production system	Legislation in England		
	Animal Welfare Act 2006	Welfare of Farmed Animals (England) Regulations 2007 (as amended) Schedule 1	Welfare of Farmed Animals (England) Regulations 2007 (as amended) Schedule 10
Holdings with <500 birds	+	+	-
Broiler Breeder flocks	+	+	-
Hatcheries	+	+	-
>500 birds conventionally reared stocking density up to 33kg/m <sup>2</sup>	+	+	+
>500 birds conventionally reared stocking density more	+	+	+

than 33kg/m <sup>2</sup> up to 39kg/m <sup>2</sup>			
>500 birds conventionally reared stocking density more than 39kg/m <sup>2</sup> up to 42kg/m <sup>2</sup>	+	+	+
Free range chickens*, (maximum stocking density 27.5kg/ m <sup>2</sup> )	+	+	-
Extensive indoor*, (maximum stocking density 25kg m <sup>2</sup> )	+	+	-
Organically reared chickens in accordance with Council Regulation (EC) No 834/2007 (maximum stocking density 21kg/m <sup>2</sup> )	+	+	-

\* as referred to in points (b), (c), (d), (e) of Annex V to Commission Regulation (EEC) No 543/2008 introducing detailed rules for implementing Regulation (EEC) No 1234/2007 as regards the marketing standards for poultrymeat

4. For the purposes of this code, “flock-keeper” means the owner of the birds and the person responsible for looking after them, if different.

5. No person should operate or set up a meat chicken or breeding chicken unit unless the welfare of all the birds can be safeguarded. This can be achieved by ensuring that the buildings and equipment, and the skills and ability of the flock-keeper, are appropriate to the husbandry system and the number of birds to be kept.

6. The relevant animal welfare legislation applies to owners as well as any person looking after the chickens on their behalf, wherever the chickens are located. A written contract can be of value in ensuring that all parties are clear about their responsibilities in respect of welfare. However, the obligations imposed by the law will still apply.

7. The strains of bird selected must be suitable for the production system. In particular, care must be taken in the production of birds with extended growing periods (e.g. organic, free range) to use suitable strains and feeding regimes.

## Recommendations applying to all systems

### Stockmanship and Staffing (including catching)

#### ALL MEAT CHICKENS

Schedule 1, paragraph 1 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) (S.I. 2007 No. 2078) states that:

Animals must be cared for by a sufficient number of staff who possess the appropriate ability, knowledge and professional competence.

#### CONVENTIONALLY REARED MEAT CHICKENS

Schedule 10 Part 2 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) states:

2(1) The keeper of chickens must hold a certificate recognised by the Secretary of State for the purposes of Article 4(3) of Council Directive 2007/43/EC (certificates of completion of training courses or equivalent experience).

(2) The Secretary of State must publish from time to time, in such a way as the Secretary of State considers appropriate, a list of certificates recognised by the Secretary of State for the purposes of sub-paragraph (1).

8. Stockmanship is one of the most important influences on the welfare of farmed animals. FAWC's Three Essentials of Stockmanship encompass the desired attributes of a good stockperson;

**Knowledge of animal husbandry;** demonstrated through an understanding of the biology and husbandry of farm animals, including how their needs may be best provided for in all circumstances;

**Skills in animal husbandry;** demonstrated through appropriate observation, handling, care and treatment of animals, and problem detection and resolution;

**Personal qualities;** demonstrated through affinity and empathy with animals, dedication and patience.

9. It is essential that sufficient well-motivated and competent personnel are employed to carry out all necessary tasks. Staff should be well managed and supervised, fully conversant with the tasks they will be required to undertake and competent in the use of any equipment.

10. All flock-keepers should demonstrate full understanding of the welfare needs and basic biology of the birds and have shown that they are capable of safeguarding them under all foreseeable conditions before being given responsibility for a flock. A good flock-keeper will have a compassionate and humane attitude, will be able to anticipate and avoid many potential welfare problems, and have the ability to identify those that do occur and respond to them promptly

11. Staff, including those employed by contractors, should be given appropriate training. This requires the acquisition of specific stockmanship skills which may be developed on-farm, working with an experienced person, or by following a course offered by a suitable training provider. Flock-keepers should demonstrate competence and understanding before they are given responsibility for birds. Training should continue throughout the duration of employment, and suitable refresher courses should be undertaken regularly. Wherever possible, the training should be of a type which leads to formal recognition of competence.

12. Those who have responsibility for looking after chickens in conventional systems, must have a certificate attesting to a completion of a recognised training course or equivalence. The course must cover in particular the areas covered by Annex IV to Directive 2007/43/EC, physiology, the practical aspects of the careful handling of chickens and catching, loading and transport, emergency care for chickens, emergency killing and culling and preventative biosecurity measures. These are areas in which all flock keepers, regardless of system of production, could usefully receive training. Further guidance on training and qualifications is available from the Defra website.

13. The catching and handling of birds without causing them injury or stress requires skill. It should only be undertaken by competent persons, i.e. those who have been appropriately trained for the task and received clear guidance and instructions from the owner or keeper. Responsibility for the management of the operation should be clearly allocated.

14. High standards must be applied irrespective of the potential economic value of the birds. Surplus birds or birds at the end of lay awaiting disposal should be treated as humanely as those intended for retention or sale.

15. Panic among the birds and subsequent injury should be avoided. Catching should take place in low or blue light to minimise fear responses. Catching and handling should be carried out quietly and confidently exercising care to avoid unnecessary struggling which could bruise or otherwise injure the birds.

16. Unless they are caught and carried around the body (using both hands to hold the wings against the body), birds should be caught and carried by both legs. No catcher should carry by the legs more than three chickens (or two adult breeding birds) in each hand. Birds must not be carried by the wings or by the neck.

## Feed and Water

### **ALL MEAT CHICKENS**

Schedule 1, paragraphs 22-27 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended), state that:

- Animals must be fed a wholesome diet which is appropriate to their age and species and which is fed to them in sufficient quantity to maintain them in good health, to satisfy their nutritional needs and to promote a positive state of well-being.
- Animals must not be provided with food or liquid that contains any substance that may cause them unnecessary suffering or injury and must be provided with food and liquid in a manner that does not cause them unnecessary suffering or injury.
- All animals must have access to feed at intervals appropriate to their physiological needs (and, in any case, at least once a day) except where a veterinary surgeon acting in the exercise of his profession otherwise directs.
- All animals must either have access to a suitable water supply and be provided with an adequate supply of fresh drinking water each day or be able to satisfy their fluid intake needs by other means.
- Feeding and watering equipment must be designed, constructed, placed and maintained so that contamination of food and water and the harmful effects of competition between animals are minimised.

- No other substance, with the exception of those given for therapeutic or prophylactic purposes or for the purpose of zootechnical treatment, may be administered to animals unless it has been demonstrated by scientific studies of animal welfare or established practice that the effect of that substance is not detrimental to the health or welfare of the animals.

### **CONVENTIONALLY REARED MEAT CHICKENS**

Schedule 10, paragraph 7 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) states that:

- Drinkers must be positioned and maintained in such a way that spillage is minimised.
- Feed must be either continuously available or be meal fed.
- Feed must not be withdrawn from chickens more than 12 hours before the expected slaughter time.

17. Suitable, correctly balanced nutrition designed specifically for the age and strain of the bird is important for rearing healthy broilers. Feed management practices should incorporate nutritional guidance for strain type provided by the company supplying the birds, in addition to any veterinary advice.

18. Managing nutrient density of the diet to reduce growth rate can improve leg health and reduce diseases such as ascites and sudden death syndrome. Any changes in diet should be introduced gradually and with appropriate veterinary /specialist advice. Sudden changes in the type, quantity and make-up of feed should generally be avoided.

19. All birds should have daily access to feed. When introducing birds to a new environment, the flock-keeper should ensure that the birds can find feed and water.

20. To prevent birds having access to stale or contaminated feed or water these should be replaced on a regular basis. Suitable provision must be made for supplying water in freezing conditions.

21. The maximum distance which any bird should have to travel in a house to reach feed and water should not be more than 4 metres. However, in some situations, such as some outdoor production systems, it may be necessary for the birds to travel more than 4 metres; in these situations, all birds must be adequately cared for in terms of stocking density, feeding and drinking space, and the distribution of feeders and drinkers, to allow for such movements.

22. For meat chickens, feed should not be withheld for more than 12 hours before the birds are slaughtered or delivered to a new farm. This period of 12 hours must be an inclusive period to include the catching, loading, transport lairaging and unloading time prior to slaughter. Prior to transport water should be provided up to the start of the loading procedure

23. Water meters should be fitted to each house to enable daily monitoring of water usage. Daily records of water consumption provide an early warning of potential problems and a water meter is a necessary management tool.

24. Daily access to water throughout the period of lighting and a sufficient number of drinkers, correctly maintained, well distributed and adjusted for height and pressure, should be provided. In longer poultry houses, and in those with greater floor slopes, water pressure regulators should be provided if spillage or leakage is considered a problem.

Health

## Inspection

### **ALL MEAT CHICKENS**

Schedule 1, paragraph 2 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) requires that:

- Animals kept in husbandry systems in which their welfare depends on frequent human attention must be thoroughly inspected at least once a day to check that they are in a state of well-being. (but see below).
- Animals kept in systems other than husbandry systems in which their welfare does not depend on frequent human attention must be inspected at intervals sufficient to avoid any suffering.

Schedule 1, paragraph 3 states that:

- Where animals are kept in a building, adequate lighting (whether fixed or portable) must be available to enable them to be thoroughly inspected at any time.

### **CONVENTIONALLY REARED MEAT CHICKENS**

Schedule 10, paragraph 12 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) states:

- All chickens must be inspected at least twice a day.
- Special attention must be paid to signs indicating a reduced level of animal health or welfare.
- Chickens that are seriously injured or show evident signs of health disorder (including those having difficulties in walking, severe ascites or severe malformations), and are likely to suffer, must receive appropriate treatment or be culled immediately.

25. In order to reduce the risk of welfare problems developing it is recommended that a systematic inspection of all flocks should be undertaken at least twice each day at appropriate intervals. Young birds, in the first few days of life, should be inspected at least three times a day.

26. Health and welfare inspections may be linked with other visits to the poultry houses but each inspection should be undertaken as a separate, specific procedure.

27. Flock-keepers should establish in advance the best course of action to take should problems be identified and ensure that veterinary or other expert advice is available when needed.

28. Light levels during inspection should be sufficient to ensure that all birds in all parts of the house are clearly visible.

29. While it may not be possible to examine each bird individually during routine inspection a good indication of flock health should be gained on each occasion. Where birds are not being fed on *ad lib* diets, inspection is particularly effective at feeding time when any birds which are not fit will be slow to feed and can be identified.

30. In order to ensure a thorough inspection the flock-keeper should walk within 3 metres of every bird and encourage it to move, taking care not to frighten the birds with sudden, unaccustomed movement, noise or changes in light levels. The aim should be to pass close enough to the birds to see them clearly and for them to be disturbed and so move away. This should enable the identification of any individual that is sick, injured or weak.

## Disease Control and Slaughter/Killing on Farm

### **ALL MEAT CHICKENS**

Schedule 1, paragraph 5 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended), states that any animals which appear to be ill or injured:

- must be cared for appropriately and without delay; and
- where they do not respond to such care, veterinary advice must be obtained as soon as possible.

Schedule 1, paragraph 6 states:

- Where necessary, sick or injured animals must be isolated in suitable accommodation with, where appropriate, dry comfortable bedding.

### **CONVENTIONALLY REARED MEAT CHICKENS**

Schedule 10 , paragraph 13 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) states that those parts of buildings, equipment, or utensils which have been in contact with the chickens must be thoroughly cleaned and disinfected every time after final depopulation is carried out, before a new flock is introduced into the house. All litter must be removed and clean litter provided for the new flock after the final depopulation.

31. A health and welfare plan should be implemented for each unit which sets out health and husbandry activities covering the whole of the production cycle. It should also establish management procedures and control measures to reduce the risk of infections and injury. The plan should be developed with appropriate veterinary advice, reviewed against performance and updated accordingly.

32. Important indications of good health are clear, bright eyes, alertness, good posture, vigorous movements if unduly disturbed, active feeding and drinking, singing and vocalisation, satisfactory egg production in the case of breeding chickens, and clean and healthy skin, shanks and feet. Any

departure from the norm may indicate a problem which should be given immediate attention.

33. A disease challenge may first be noticed by a change in water consumption, a reluctance to eat, changes in droppings, changes in litter quality or in the general behaviour of the flock. A marked change in water use should be thoroughly investigated. Veterinary attention should be sought at an early stage in any outbreak of disease so that the cause can be determined and appropriate action taken.

34. Measures to control diseases caused by external parasites should be taken by using the appropriate parasiticides. It is particularly important to take measures to prevent the establishment of red mite infestation in breeding chicken flocks; these measures must not cause harm to the birds.

35. Any sick, injured or weak birds should immediately be removed to a hospital pen, providing that they are able to eat, drink and stand unassisted, and examined frequently throughout the day. However, if a bird is suffering and cannot be treated or if it fails to show significant improvement within 24 hours of being placed in the hospital pen it should be humanely killed without delay. Birds with considerable difficulty in walking, severe ascites, malformations, severe wounds or seizures should be culled immediately unless they can be treated and are likely to recover without unnecessary suffering. Dead birds should be removed without delay.

36. All those in contact with birds should practice strict hygiene and disinfection procedures and in particular between each house to limit disease spread. Where possible the site should be managed so that all houses are empty simultaneously to facilitate effective cleaning, disinfection and disinfestation. An “all in – all out” approach with periods when there are no birds on site will also act to provide a disease break. Where multi age sites are managed follow a regular routine in attending to youngest flocks first through to oldest.

37. The bird accommodation should be first dry cleaned to remove organic material, washed and then disinfected.

38. When houses are emptied and cleaned, old litter should be removed from the site before re-stocking so as to reduce the risk of carry over of disease.

39. When planning new sites, consideration should be given to providing the maximum possible distance between the proposed site and existing sites, and also between houses, to improve biosecurity.

## Leg Health

40. Lameness and leg disorders are a key cause of poor welfare in meat chickens. In meat chickens reared up to 6 weeks of age this has been particularly associated with rapid growth. It can be less prevalent in the slower growing strains. Nutritional deficiencies and imbalances, including calcium, phosphorus and Vitamin D can also lead to an increase in bone deformities and lameness. Lameness may also be caused by a bone or joint infection so effective prevention and control of viral and bacterial disease and good litter management are essential.

41. Flock-keepers should monitor all birds for signs of lameness, leg weakness or abnormal gait on a daily basis. When recording mortalities and culls it is useful to record the cause so that lameness can be monitored within and between flocks.

42. Flock keepers should be particularly vigilant when the risk of lameless is highest, such as towards the end of the production cycle and during the summer months when bird activity may be at its lowest.

43. If a lameness problem develops, management and husbandry practices must be immediately assessed. Any changes should be instigated as soon as practically possible and where appropriate following veterinary and/or technical advice of the breed supplier.

44. Certain management practices can limit or reduce the level of lameness in flock, and should be taken having regard to previous experience on the farm and recognised best practice. Increasing the activity of the broiler in the day and encouraging proper rest at night, for example through manipulation of the lighting patterns (increasing light intensity during light periods combined with a longer uninterrupted dark period) can reduce lameness. Increased activity can also be achieved by enriching the environment and reducing stocking density.

45. Growth can be slowed by making changes to the feed composition and structure (such as increasing the proportion of whole wheat and using mash feed rather than pelleted feed) and feeding routine but should be carried out with appropriate veterinary and technical advice. In addition effects of dietary change on litter condition should be closely monitored.

46. Chickens can suffer from lameness due to infections acquired in the parent flock or hatchery. High standards of biosecurity and hygiene in the parent flock, in the handling of the eggs, at the hatchery and in subsequent

handling and transport of the chicks should be maintained. Husbandry measures and practices on the breeding farm should be designed to minimise floor eggs and heavily soiled eggs should not be set as hatching eggs.

47. Enriched environments should be considered to increase the activity of birds.

48. Careful consideration should be given by the flock-keeper as to whether lame birds are legally fit to travel. If they are not, they should be humanely killed on farm.

## Mutilations

### **ALL MEAT CHICKENS**

Section 5 of the Animal Welfare Act 2006 states:

- (1) A person commits an offence if—
  - (a) he carries out a prohibited procedure of a protected animal;
  - (b) he causes such a procedure to be carried out on such an animal.
- (2) A person commits an offence if—
  - (a) he is responsible for an animal,
  - (b) another person carries out a prohibited procedure on the animal, and
  - (c) he permitted that to happen or failed to take such steps (whether by way of supervising the other person or otherwise) as were reasonable in all the circumstances to prevent that happening).
- (3) References in this section to the carrying out of a prohibited procedure on an animal are to the carrying out of a procedure which involves interference with the sensitive tissues or bone structure of the animal, otherwise than for the purpose of its medical treatment.
- (4) Subsections (1) and (2) do not apply in such circumstances as the appropriate national authority may specify by regulations.

The Mutilations (Permitted Procedures) (England) Regulations 2007 (as amended) allows veterinary surgeons or other persons permitted to carry out the procedures under the Veterinary Surgeons Act 1966 or the Veterinary Surgeons (Exemptions) Order 1962 to carry out a number of permitted procedures on specified animals, including poultry.

### **CONVENTIONALLY REARED MEAT CHICKENS**

The Mutilations (Permitted Procedures) (England) Regulations 2007 (as amended) states in paragraph A1 of Schedule 4 that none of the permitted procedures set out in the Schedule may be performed on conventionally reared meat chickens (except for beak trimming in certain circumstances.)

49. Mutilations are undesirable and can cause considerable pain and therefore constitute a major welfare insult to farm animals.

## Beak trimming

### ALL MEAT CHICKENS

Schedule 4, paragraph 5 of the Mutilations (Permitted Procedures) (England) Regulations 2007 (as amended) states:

The procedure must be performed using a suitable instrument, and on—  
(a) Both the lower and upper beaks, with not more than one third of each removed, or  
(b) The upper beak only, with not more than one third removed.

Any subsequent haemorrhage from the beak must be arrested by cauterisation.

### CONVENTIONALLY REARED MEAT CHICKENS

The Mutilations (Permitted Procedures) (England) Regulations 2007 (as amended) states in Schedule 4, paragraph 5, that beak trimming may only be carried out on conventionally reared meat chickens which are less than 10 days old, in order to prevent feather pecking and cannibalism

50. Beak trimming of birds reared for meat should not be necessary because they are normally slaughtered before reaching sexual maturity. Beak trimming of breeding chickens should be avoided if at all possible, and used only if veterinary advice is that the procedure is essential to prevent worse welfare problems of injurious feather pecking and cannibalism. Consideration should be given to environmental enrichment as a means of avoiding the necessity to beak trim; possible methods of environmental enrichment include the provision of straw bales or brassicas or scattering of whole grain.

## Laparoscopy

Schedule 4, paragraph 7 of the Mutilations (Permitted Procedures) Regulations 2007 (as amended) states: that the procedure may not be carried out on a bird that is aged 3 days or over unless a veterinary surgeon

considers that it is necessary to be carried out and an anaesthetic is administered.

Paragraph 1 prohibits the carrying out of this procedure on conventionally reared chickens

51. Laparoscopy is the examination of the abdominal cavity by insertion of an instrument called a laparoscope.

## Buildings and accommodation

### ALL MEAT CHICKENS

Schedule 1, paragraphs 11 and 12 of the Welfare of Farmed Animals (England) Regulations 2007 ,state that:

Materials used for the construction of accommodation, and in particular for the construction of pens, cages, stalls and equipment with which the animals may come into contact, must not be harmful to them and shall be capable of being thoroughly cleaned and disinfected.

Accommodation and fittings for securing animals must be constructed and maintained so that there are no sharp edges or protrusions likely to cause injury to them.

## General

52. Advice on welfare aspects should be sought from qualified advisers before any new buildings are constructed or existing buildings modified. It is important to ensure that the design of housing and equipment is suitable for the intended use. The incorporation of facilities for raising drinkers and feeders to aid access for handling equipment should be considered. Consideration should also be given to the incorporation of weighing, handling and loading facilities.

53. Flock-keepers should take measures to protect birds from predators, rodents and other animals.

## Ventilation and temperature

## **ALL MEAT CHICKENS**

Schedule 1, paragraph 13 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) states that:

Air circulation, dust levels, temperature, relative air humidity and gas concentrations must be kept within limits which are not harmful to the animals.

## **CONVENTIONALLY REARED MEAT CHICKENS**

For birds being stocked at the higher densities provided for under the Welfare of Farmed Animals (England) Regulations 2007 (as amended) Schedule 10, paragraph 5 (c) requires each house to be equipped with ventilation, and if necessary, heating and cooling systems designed, constructed and operated in such a way that:

- The concentration of ammonia (NH<sub>3</sub>) does not exceed 20 parts per million measured at the level of the chickens' heads; and
- The concentration of carbon dioxide (CO<sub>2</sub>) does not exceed 3000 parts per million measured at the level of the chickens' heads; and
- When the outside temperature measured in the shade exceeds 30 degrees C, the inside temperature does not exceed the outside temperature by more than 3 degrees C; and
- When outside temperature is below 10 degrees C, the average relative humidity measured inside the house during a continuous period of 48 hours does not exceed 70%.

54. Ventilation rates, air distribution and house conditions should at all times be adequate to provide sufficient fresh air for the birds, without draughts, and keep the litter dry and friable. Air quality, including dust level and concentrations of carbon monoxide should be controlled and monitored and kept within limits where the welfare of the birds is not negatively affected.

55. Chicks should be placed in a pre-heated house when they arrive and their behaviour monitored carefully. Young chicks are particularly susceptible to extremes of temperature and an even distribution of the chicks in the house will indicate that they are comfortable. After 4-5 weeks birds can tolerate a fairly wide range of temperatures but every effort should be made to avoid creating conditions which will lead to chilling, huddling and subsequent smothering.

56. Birds on restricted feed are more susceptible to low temperatures but less so to high temperatures. If the temperature is allowed to fall there may be a need to increase feed or provide heaters.

57. In older buildings stocked at the higher densities, additional heat, coupled with a higher level of minimum ventilation, may be required to reduce relative humidity levels below 70%.

58. Extremes of temperature should be avoided. Birds should be protected from cold draughts. Efforts should be made to ensure that the ventilation system provides appropriate air speed and distribution for the age and breed of bird throughout the house.

59. Birds should not be exposed to strong, direct sunlight or hot, humid conditions long enough to cause heat stress as indicated by prolonged panting. Housing affects the birds' ability to maintain their normal body temperature but under any management system ambient temperatures high enough to cause prolonged panting may occur, particularly when humidity is relatively high. All accommodation should therefore be designed so that its ventilation is adequate to protect the birds from overheating under any weather conditions that can reasonably be foreseen. Attention should be paid to air throughput, distribution and especially air movement at bird level.

60. Flock-keepers should plan ahead to avoid heat stress. During the summer months consideration should be given to reducing stocking density at the time of ordering or placing day-old chicks. If suffering or mortality occurs, the onus will be on the person responsible for the birds to demonstrate that the measures taken were appropriate for the design of the building, its locality and the predictable maximum temperature/humidity at the time.

61. During hot and humid conditions, the birds should be checked frequently, but not disturbed unduly.

62. Steps should be taken to minimise the potential for heat stress by increasing ventilation and air speed at bird level. Portable back-up fans can be of assistance in certain circumstances. The air temperature within a building may be reduced by improved insulation and the correct use of evaporative cooling of incoming air, taking care to avoid a combination of high temperature and high humidity. Spraying of cold water on the roof should be considered as a last resort, and only when temperature and humidity levels are appropriate. The heat output of the birds may be reduced by lowering stocking density or changing the feeding patterns.

63. For flocks stocked at densities in excess of  $33 \text{ kg/m}^2$ , it is suggested that an air speed of at least 1 m/second be provided over as much of the floor area as is possible in conventionally ventilated buildings. In buildings with tunnel ventilation capability, the suggested air speed is at least 2 m/second. For

naturally ventilated buildings, inlets and outlets should be sufficiently large to allow as high an air speed as possible over the birds. Free-standing fans can be introduced to provide additional air movement at bird level.

## Lighting

### **ALL MEAT CHICKENS**

Schedule 1, paragraphs 14-16 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) , state that:

Animals kept in buildings must not be kept in permanent darkness.

Where the natural light available in a building is insufficient to meet the physiological or ethological needs of any animals being kept in it, appropriate artificial lighting must be provided.

Animals kept in buildings must not be kept without an appropriate period of rest from artificial lighting.

### **CONVENTIONALLY REARED MEAT CHICKENS**

Schedule 10, paragraph 11 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) states that all buildings must have lighting with an intensity of at least 20 lux during the lighting period, measured at bird eye level and illuminating at least 80% of the usable area.

A temporary reduction in the lighting level may be allowed when necessary following veterinary advice.

Within seven days from the time when the chickens are placed in the building and until three days before the expected time of slaughter, the lighting must follow a 24-hour rhythm and include periods of darkness lasting at least six hours in total, with at least one uninterrupted period of darkness of at least four hours, excluding dimming periods.

64. Chickens should be housed at light levels which allow them to see clearly and which stimulate activity. This will be achieved by lighting systems designed, maintained and operated to give a minimum light of 20 lux at bird eye height over at least 80% of the useable area. If a behavioural problem such as cannibalism occurs, it may be necessary following veterinary advice to dim the lights for a few days.

65. Meat chickens which do not have access to daylight should be given an uninterrupted period of darkness of at least 6 hours. This will lead to a

significant increase in bird activity when the lighting level is restored, including for example back scratching. Greater attention to management practices will therefore be required to ensure that the birds' welfare is maintained when the light is restored. For example, sufficient feeders and drinkers must be available to allow all birds to eat and drink at the same time following the period of darkness. Attention will also need to be paid to litter condition, particularly under nipple lines, which could become wet due to the number of birds drinking at the same.

66. In the first 7 days following placing of the birds in the house, chicks should be provided with sufficient lighting to ensure that they can easily find feed and water.

## Litter

### **ALL MEAT CHICKENS (except for conventionally reared)**

Regulation 5 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended), states that:

A person responsible for poultry (other than those kept in the systems referred to in Schedules 2 to 4 and 10) kept in a building must ensure that they are kept on, or have access at all times to, well-maintained litter or a well-drained area for resting.

### **CONVENTIONALLY REARED MEAT CHICKENS**

Regulation 2(1) and Schedule 10, paragraph 8 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) requires that all chickens shall have access to litter which is dry and friable on the surface.

67. Meat chickens and breeding chickens spend their lives in contact with litter and their health and welfare are linked to its quality. Conditions such as hock burn, foot pad lesions and breast blisters are consequences of poor litter quality. Well-designed equipment and high standards of management are important if good litter quality is to be maintained. The ventilation capacity should be sufficient to avoid overheating and to remove excess moisture. The feed composition should be well balanced to avoid problems with wet or sticky droppings.

68. Litter should be kept loose and friable and measures should be taken to minimise the risk of mould and mite infestation. It should be inspected frequently for signs of deterioration and appropriate action should be taken to rectify any problem. Litter should also be inspected to ensure it does not become excessively wet or dry. A drinker system which minimises water

spillage should be used, such as water nipples with drip cups positioned at an appropriate height for all birds. Nipple drinkers without cups may be used if they are well managed and the water pressure is checked frequently.

## **Stocking density and freedom of movement**

### **ALL MEAT CHICKENS**

Schedule 1, paragraph 9 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) states that:

The freedom of movement of animals, having regard to their species and in accordance with good practice and scientific knowledge, must not be restricted in such a way as to cause them unnecessary suffering or injury.

Schedule 1, paragraph 10 states that:

Where animals are continuously or regularly confined, they must be given the space appropriate to their physiological and ethological needs in accordance with good practice and scientific knowledge.

### **CONVENTIONALLY REARED MEAT CHICKENS**

Schedule 10, paragraph 3 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) requires the person responsible to notify the competent authority of the stocking density to be used for each house and any subsequent change to that notified density. If the stocking density is more than 33kg/m<sup>2</sup>, the notification must occur at least 15 working days before stocking at that density or changed density takes place.

Schedule 10, paragraph 4 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) allows a maximum stocking density of 33 kg/m<sup>2</sup> for a house of a holding if the requirements in paragraph 5 are complied with.

The requirements set out in paragraph 5 are that:

Documentation shall be maintained, and be available in the house, describing, in detail, the production systems. It shall include information on technical details of the house and its equipment such as:

- a plan of the house, including the dimensions of the surfaces occupied by the chickens
- the ventilation system
- the heating and cooling system (if applicable)
- a ventilation plan detailing target air quality parameters, such as air flow, air speed and temperature
- feeding and watering systems and their location

- alarm systems and back-up systems in the event of a failure of any automated or mechanical equipment essential for the health and well-being of the chickens
- floor type and litter normally used

The documentation shall be made available to the competent authority on request and shall be kept updated.

Technical inspections of the ventilation and alarm systems must also be recorded.

Schedule 10, paragraph 4 also permits the use of a stocking density higher than 39kg/m<sup>2</sup> up to a maximum of 42 kg/m<sup>2</sup> providing the following conditions (set out in paragraph 6) are met in addition to those listed above. These are that:

- no inspection of the holding in the previous two years has revealed a failure to comply with the Welfare of Farmed Animals (England) Regulations 2007 (as amended),
- the flock keeper has carried out inspections using a relevant Code of Practice and ,
- in at least seven consecutive, subsequently checked flocks from any house in the holding, the cumulative daily mortality rate was either below 1% + (0.06% multiplied by the slaughter age of the flock in days), or above that figure but for reasons which are beyond the control of the flock keeper and which the Secretary of State considers sufficient.

The Competent Authority must give approval to stock at this density.

69. A variety of factors needs to be taken into account when setting and monitoring stocking densities in chicken houses at levels which promote good welfare. The observance of any particular stocking density is important but cannot, by itself, ensure the welfare of the birds. There is a close relationship between stockmanship, environmental control and stocking density. Birds will be maintained in good condition only if the balance is right and the onus is on the producer to demonstrate that welfare is not compromised, whatever the stocking density.

70. Poor locomotion and gait may be associated with higher stocking densities. Irrespective of the type of system, all chickens should have sufficient freedom of movement to be able, without difficulty, to stand normally, turn around and stretch their wings. They should also have sufficient space to be able to sit without interference from other birds.

71. Stocking density should be reduced and specialist advice taken if problems occur, in particular excessive heat or humidity due to inadequate ventilation and poor litter quality. If disease or environmental problems arise

in a particular building or system, reducing the stocking density in subsequent flocks may lessen the likelihood of recurrence.

72. Thinning can be stressful and where possible should be avoided. If it is carried out then it should be done with care to ensure as minimal disturbance to the birds and to their feeding and watering as possible and so as to maintain biosecurity.

## Automatic or Mechanical Equipment

### **ALL MEAT CHICKENS**

Schedule 1, paragraph 18 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) states that:

All automated or mechanical equipment essential for the health and well-being of the animals must be inspected at least once a day to check that there is no defect in it.

Schedule 1, paragraph 19 states that:

Where defects in automated or mechanical equipment of the type referred to in paragraph 18 are discovered, these must be rectified immediately, or if this is impossible, appropriate steps must be taken to safeguard the health and well-being of the animals pending the rectification of those defects including the use of alternative methods of feeding and watering and methods of providing and maintaining a satisfactory environment.

On artificial ventilation systems, Schedule 1, paragraph 20 states that where the health and well-being of the animals is dependent on an artificial ventilation system:

(a) provision must be made for an appropriate back-up system to guarantee sufficient air renewal to preserve the health and well-being of the animals in the event of failure of the system, and

(b) an alarm system (which will operate even if the principal electricity supply to it has failed) must be provided to give warning of any failure of the system.

Schedule 1, paragraph 21 states that:

The back-up system referred to in paragraph (a) must be thoroughly inspected and the alarm system referred to in paragraph 20(b) tested at least once every

seven days in order to check that there is no defect and, if any defect is found at any time, it must be rectified immediately.

### **CONVENTIONALLY REARED MEAT CHICKENS**

Schedule 10, paragraph 10 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) states that in all houses:

(a) the sound level must be minimised, and

(b) ventilation fans, feeding machinery or other equipment must be constructed, placed, operated and maintained in such a way that they cause the least possible amount of noise.

73. All equipment and services, including feed hoppers, feed chain and delivery systems, drinkers, ventilating fans, heating and lighting units, fire extinguishers and alarm systems, should be cleaned and inspected regularly and kept in good working order.

74. Ventilation, heating, lighting, feeding, watering and all other equipment or electrical installation should be designed, sited and installed so as to avoid risk of injuring the birds.

75. All automated equipment upon which the birds' welfare is dependent must incorporate a fail safe or standby device and an alarm system to warn the flock-keeper of failure. Defects should be rectified immediately or other measures taken to safeguard the health and welfare of the birds. Alternative ways of feeding and of maintaining a satisfactory environment should therefore be ready for use.

## Additional recommendations for free range systems

Schedule 1, paragraph 17 of the Welfare of Farmed Animals (England) Regulations 2007 states that:

- Animals not kept in buildings must, where necessary and possible, be given protection from adverse weather conditions, predators and risks to their health and must, at all times, have access to a well-drained lying area.

76. Land on which range birds are kept for prolonged periods may become “fowl sick”, i.e. contaminated with organisms which cause or carry disease to an extent which could seriously prejudice the health of the birds on the land. Flocks should be routinely monitored to check for a build up of pathogens on the land. The time taken for land to become fowl sick depends on the type of land and stocking density. Appropriate measures should be taken to prevent fowl sickness or to provide a new ranging area by moving the housing (in the case of portable units) or to rotating the ranging area outside fixed buildings.

77. Sufficient housing should be available to the birds at all times and it may be necessary to exclude birds from the range in bad weather if there is a clear danger that their welfare will be compromised.

78. Birds should be encouraged to use the outdoor area by provisions of adequate suitable, properly managed vegetation, a fresh supply of water and overhead cover, all sufficiently far from the house to encourage the birds to range.

79. Factors such as soil type, drainage and size of colony and frequency of flock rotation are very important in deciding the number of birds that a particular area can carry. Heavy, poorly drained soil can carry fewer birds than land which is light and well drained.

## Record Keeping

### All Meat Chickens

Schedule 1, paragraph 7 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) states that a record shall be maintained of:

- any medicinal treatment given to animals, and
- the number of mortalities found on each inspection of animals carried out in accordance with the provisions in Schedule 1, paragraph 2 (1).

Schedule 1, paragraph 8 states that the record referred to in paragraph 7 must be retained for a period of at least three years from the date on which the medical treatment was given, or the date of the inspection, as the case may be, and must be made available to an inspector on request

### Conventionally Reared Meat Chickens

Schedule 10, paragraph 14 of the Welfare of Farmed Animals (England) Regulations 2007 (as amended) states:

- 12.—(1) The person responsible must maintain, for each house in which chickens are kept, a record of—
- (a) the number of chickens introduced;
  - (b) the usable area;
  - (c) the hybrid or breed of the chickens (if known);
  - (d) the number of chickens found dead, with an indication of the causes (if known), as well as the number of chickens culled with cause, on each inspection; and
  - (e) the number of chickens remaining in the flock following the removal of chickens for sale or slaughter.
- (2) The record must be retained for at least three years.

80. As well as these record keeping requirements, a number of other legislative provisions exist for record keeping on farm. These are set out in the Annex to this Code.

## **Contingency Planning**

81. Measures should also be put in place for contingency planning following an assessment of possible hazards. Such plans should deal with events such as the disruption of feed or water supply, heat stress, natural disasters such as floods and fires, arrangements for dealing with restrictions placed in case of notifiable disease including dealing with delays on moving birds to slaughter and the housing of free-range birds. Plans should also include arrangements for both killing and disposal of flocks when depopulation is required in the event of notifiable disease or due to contamination of feed and pasture with toxins etc.

## **Additional recommendations for breeding chickens**

82. Breeding birds for meat chickens have been selected for many traits including large appetites, fast growth and egg production. Consequently, their husbandry requirements are complex and demand committed and competent stockmanship and a high standard of housing and equipment. Control of the environment is essential.

## **Feed and water**

83. As in many aspects of husbandry, to promote optimum welfare the amount of feed offered to breeding chickens is a fine balance between offering too much feed (because birds fed to demand would become obese with increased mortality and reduction in numbers of hatching eggs) and causing suffering due to hunger and starvation. The weight of present evidence is that the overall welfare of the current genotype of breeding bird is better if feed is restricted. However it is particularly important that the effects on the individual bird are carefully monitored by skilled staff.

84. Whilst most breeding flocks will have their growth rate reduced using quantitative food restriction (the birds are fed a much lower amount of their standard growing or maintenance diet once or twice per day), consideration should be given to exploring alternative methods of restricting feed through qualitative feed restriction.

85. Birds quantitatively feed restricted show increased drinking, and displacement behaviour such as environmental pecking (e.g. pecking at the empty feeder and the wall or 'spot' pecking). (See also paragraph 93). Higher water intakes can impact negatively on litter quality. Increasing the fibre content of the feed increases the time taken for birds to consume their food and reduces their water intake thereby improving litter condition.

86. A combination of additional fibre and increasing levels of appetite suppressants may allow a feeding regime to more closely reflect adlib feeding leading to a much lower feed motivation compared with traditionally quantitatively fed birds as well as reducing environmental pecking, reduced water intake and improved litter condition. This has no negative impact on subsequent egg production, weight or quality by the breeding birds.

87. Feeding equipment should be capable of delivering small quantities rapidly, accurately and evenly to all birds in the house and the amount of trough space allocated should allow access to feed for all birds intended to be fed. If feed is scattered, it should be distributed over sufficient area to allow access for all birds to be fed.

88. In no circumstances should breeding birds be induced to moult by withholding feed and water.

89. Birds should not be fed on the day of transportation as they travel more comfortably with an empty crop. Increased feed should be given to breeding birds on the day before travel and water should be made available up to the time of catching.

90. For breeding birds, it may be necessary to manage the supply of water in relation to the feeding system and programme to reduce excessive drinking and to maintain litter quality. When access to water is time limited it is vital that there is generous provision of drinkers with adequate flow to enable all birds to drink without undue competition when the water supply is turned back on.

## **Aggression & Environmental enrichment**

91. Provision of unopened bales of shavings or good quality straw as a form of enrichment may improve welfare by reducing aggression in the rearing period.

92. Scatter feeding reduces displacement behaviours and increases foraging whilst twice daily feeding increases walking which should improve leg health in the breeding birds.

93. Littered nests are preferred by breeding females and may reduce the numbers of floor eggs if litter substrate is placed in a nest whatever the base type (metal, wood, rubber mat).

## **Parent breeding chickens**

94. During the first 6 weeks of life feed levels should be adequate to ensure good skeletal development. The level of feed intake throughout rearing should be managed to achieve a steady growth, not less than 7% week-on-week, and the desired weight and condition at point-of-lay. Particular attention should be paid to ensure that all birds get an even share of the feed.

95. Feed should be offered to the birds at least daily throughout the production cycle with the exception of the day before depopulation, when a more generous allocation should be fed in anticipation of fasting the birds before slaughter.

96. In addition to routine daily checks, the body weight and condition of the birds should be systematically monitored on a weekly basis. Prompt, appropriate adjustments should be made to feed allocation according to what is found.

97. As the amount of feed offered to the birds is less than their ad-libitum intake, its nutritional quality must be carefully monitored and controlled. The flock-keeper must be particularly vigilant after changes in feed batches.

98. During lay, cockerels and hens have different nutritional requirements and may be fed differently within the same house. The equipment used to prevent cockerels taking feed intended for hens should be carefully adjusted to ensure that access for hens is maintained and cockerels are not injured. However, some systems and stages in the flock cycle require both males and females to be fed similar amounts of feed together and so it may be desirable to remove cockerel excluders from female feeding systems.

## **Elite (pedigree) birds**

99. Primary breeding companies should identify the best means of minimising the number of elite birds subject to detailed selection performance testing and the age and weight to which they grow on an ad libitum feed regimen. Once the selection procedures are complete, weekly weight gain should be used to check that the birds follow the correct body weight profile to ensure good health and production.

100. Because of the constraints to which they are subjected, the management of elite birds during the period of feed restriction (from 8 weeks to point of-lay) must avoid any other welfare challenge and provide even feed distribution, effective environmental control and avoid disease challenge.

## **Mutilations**

### **Beak trimming**

101. It is unnecessary to beak trim female breeding chicks and only the tip of the beak should be removed from male breeding chicks. This is best done before 10 days of age. Beak trimming of older birds should only be carried out when advised by a veterinary surgeon.

### **Buildings and accommodation**

102. Breeding birds should be reared in houses in which temperature, humidity, ventilation rates, light levels and photoperiods are carefully regulated. A well designed house will incorporate insulation and heaters, ventilation fans and vents, effective lightproofing, and a lighting system providing controllable light levels with uniform distribution.

103. To enrich the environment, insoluble grit should be offered (either spread on the litter or supplied in separate containers, in a measured amount) from about 6 weeks of age. This will also help the gizzard to break down any litter or feathers which may have been consumed, and encourage scratching. Foraging behaviour has the added advantage of improving litter quality. Suitable perches in the rearing house may provide a form of enrichment to aid the birds in performing another of their natural behaviours. Perches will also aid the birds' adaptation from litter to raised, perforated floors when they move to the laying house.

104. Recommended minimum light intensities and photoperiods for breeding birds are:

up to 10 days – minimum of 60 lux at day old, reducing to 10 lux and an uninterrupted day length minimum of 8 hours by 10 days of age.

up to point of lay – minimum of 10 lux. Uninterrupted day length minimum of 8 hours.

laying – minimum of 20 lux. Uninterrupted day length increasing from 8 hours to a maximum of 18 hours.

105. All the above should be measured at bird eye height. If aggression occurs, the lights should be dimmed for a few days. After the first few days of life, there should be a set period of at least 6 continuous hours of darkness in any one 24-hour period.

106. Careful attention should be paid to the hen to cockerel ratio to ensure hens do not suffer physical injury from the presence of too many cockerels in the breeder house.

## **Stocking density, freedom of movement**

107. Stocking density for breeding birds should not exceed 25 kg/m<sup>2</sup> calculated by dividing the total weight of all the birds (males and females) in the house by total area available to the birds. The calculation of stocking density should be on the basis of all stock within the house, including males.

## **Litter**

108. Good litter condition can be difficult to maintain in breeder houses, which can lead to leg problems, footpad lesions, respiratory and environmental problems. Particular attention must be paid to maintaining ventilation levels and to air movement patterns to avoid draughts at litter level.

109. In winter it can be difficult to maintain the correct temperature in breeder houses. As a result, air and litter quality can deteriorate resulting in respiratory, leg and foot pad problems. In these circumstances, supplementary heating should be available.

## **Catching, handling and transport**

110. When breeding birds are unloaded, care should be taken when lifting them out of a crate or when tipping them out of an open-topped container. Breeding birds should have immediate access to water on arrival, especially where slats are fitted.

## **Breeding Procedures**

Schedule 1, paragraph 28 of the Welfare of Farmed Animals (England) Regulations 2007 , requires that:

Natural or artificial breeding or breeding procedures which cause, or are likely to cause, suffering or injury to any of the animals concerned must not be practised.

This does not preclude the use of natural or artificial breeding procedures that are likely to cause minimal or momentary suffering or injury or that might necessitate interventions which would not cause lasting injury.

Schedule 1, paragraph 29 states that:

Animals may only be kept for farming purposes if it can reasonably be expected, on the basis of their genotype or phenotype, that they can be kept without any detrimental effect on their health or welfare.

## **Genotype selection**

111. Producers should consider whether a change in genotype of the parent stock would improve welfare and productivity. The use of a dwarf heavy broiler genotype which can be ad lib fed during the rearing period can have better subsequent egg production and liveability than non-dwarf types.

Annex

## **Other Legislation Affecting Meat Chickens**

### **Transport**

1. See Council Regulation (EC) No 1/2005 (the protection of animals during transport and related operations), the Welfare of Animals (Transport) (England) Order 2006 and associated guidance for information on transporting meat chickens.

### **Slaughter**

2. It is a general offence under the Welfare of Animals (Slaughter or Killing) Regulations 1995 (S.I. 1995 No. 731) as amended to cause or permit any avoidable excitement, pain or suffering to any animal (bird) during the slaughter or killing process (Regulation 4(1)) which includes movement, lairaging and stunning. This offence also extends to slaughter or killing outside a slaughterhouse.

3. Any person involved in slaughter or killing must have a licence (Regulation 4(3) and Schedule 1) unless killing takes place in the field using a free bullet or where an animal (bird) is slaughtered or killed by the owner for his / her private consumption.

4. When an animal (bird) is routinely slaughtered or killed on farm, this must be done using a permitted method.

5. The preferred method of killing is by percussion killer but other permitted methods of killing poultry include decapitation and neck dislocation.

### **Free range systems**

6. You should refer to EU Marketing Standards for Poultrymeat, Commission Regulation (EEC) No 543/2008 regarding stocking densities, feed requirements, access to the range and minimum age at slaughter

### **Record keeping**

7. The main requirements are summarised below. This does not represent an exhaustive list.

**Diseases of Poultry (England) Order 2003** – requires all flocks of at least 250 birds to keep records including the species of bird and when a notifiable disease is suspected in a flock, mortality records must be maintained as well as numbers of birds showing clinical sign of disease as well.

**Avian Influenza (Preventative Measures) (England) Regulations 2006** – those keeping 50 birds or more must provide details of species of bird, husbandry system in which they are kept, the number of species usually kept, number with access to open air, details on seasonal stocking variations and nearby open water. Any changes in stocking rate by an increase or decrease of 20% or more requires notification.

**Control of Salmonella in Poultry Order 2007** – requires breeding flocks of over 250 birds to notify the Secretary of State of the identity of the flock and species, the status in the pyramid (parent, grandparent etc.), the number of poultry, dates of samples taken.

**The Control of Salmonella in Broiler Flocks Order 2008** – requires sampling for Salmonella and record keeping

**The Veterinary Medicines Regulations 2008** – require records to be kept on medicine usage, administration and disposal of unused medicines. Records must be kept for at least 5 years.

Note: The Welfare of Farmed Animals (England) Regulations 2007 (as amended) relates to recording what medicine is administered and when (for welfare purposes) and applies to all farm animals. The Veterinary Medicines Regulations 2008 recording requirements are much greater in terms of what

must be recorded and how long the records must be kept and must be recorded at the point of acquisition rather than administration. Records need only be kept in relation to medicines for food producing animals (i.e. to protect the food chain).

**The Animals and Animal Products (Examination for Residues and Maximum Residue Limits) Regulations 1997** – requires various records to be kept.