EVERYONE'S A WINNER

HOW REARING CHICKENS TO HIGHER WELFARE STANDARDS CAN BENEFIT THE CHICKEN, PRODUCER, RETAILER AND CONSUMER

chicken

producer

retailer

consumer

CONTENTS

COVER PHOTO: ANDREW FORSYTH/RSPCA PHOTOLIBRARY Freedom Food indoor-reared chickens.

INTRODUCTION

There are four main groups to consider when rearing chickens for meat – the chickens themselves, the producers, the retailers and the consumers. Although the RSPCA's primary focus is on the chickens, the Society set out to see whether there could be benefits across all groups from rearing chickens to higher welfare standards. This report has been produced to provide a balanced and objective account of this study.

The objective of this report is not to undermine the chicken industry. To determine differences, however, comparisons have to be made, and in this case it is logical that typical industry practice is used as the reference point, as it is this which is currently most commonplace.

It is recognised that the responsibility for improving the welfare of today's meat chicken is unlikely to lie entirely with the industry itself. We all have a responsibility to ensure our food is produced in a way that is not detrimental to animal welfare.

However, it appears that the opportunity to create the greatest changes lies primarily with those further up the food chain, being within the hands of the few rather than the many. This said, there is a clear and crucial need for strong legislation to improve chicken welfare.

Chickens can be reared to higher welfare standards – that benefit all – if retailers and other food outlets demand it and consumers purchase it. We all have a part to play in creating positive change.

Freedom Food indoor-reared chickens.

ANDREW FORSYTH/RSPCA PHOTOLIBRARY

HOW ARE MEAT CHICKENS REARED?

Meat chickens – also referred to as 'broilers' – are by far the most numerous of farm animals produced for meat in the UK. They account for approximately one-third of the total meat production – exceeding that of any other type of meat[1]. The number of meat chickens slaughtered in the UK has risen by 16 per cent over the last 10 years, from about 740 million in 1995 to around 860 million in 2005[2], which equates to 27 chickens being slaughtered every second. For every UK citizen there are approximately 14 meat chickens reared each year, and the average annual consumption of chicken meat in the UK is about 23kg – approximately 10.5 average-sized chickens per person[1].

THE TYPICAL REARING SYSTEM

Approximately 98 per cent of all chickens are reared in large, closed buildings where temperature, artificial lighting, ventilation, food and water are all controlled to ensure the birds grow efficiently. Food and water are provided in lines along the length of the building and wood shavings are provided as a floor covering. Typically about 25,000 birds are housed together within a shed (or house), but some buildings can house up to 50,000 birds. There can be several sheds on a farm. A middle-sized 'grower', for example, may have 140,000 birds on one farm in a number of sheds[1] and will rear just under one million birds per year. It usually takes less than six weeks for the birds to reach the desired weight of around 2.2kg. They are then caught, placed into crates and transported to the abattoir.

'Standard' indoor-reared chickens.

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KEY WELFARE CONCERNS

FAST GROWTH RATE

Meat chickens have been selected to grow quickly, producing the maximum amount of meat in the minimum amount of time[3]. The time from when they first hatch to appearing on supermarket shelves can be a little over one month, i.e. birds can reach an average slaughter weight of around 2.2kg in just 37 days – an average daily weight gain of 58g[4]. It is speculated that growth rates will continue to increase[5].

WELFARE CONSEQUENCES OF A FAST GROWTH RATE:

- ascites (heart condition)
- foot pad burn
- hock burn
- leg disorders
- sudden death syndrome (heart failure).

Rapid growth rates (e.g. 57g per bird per day) can significantly contribute to the development of severe welfare problems, such as chronic leg disorders[6, 7, 8], ascites[7, 8, 9] and sudden death syndrome[7, 8, 10]. Research has shown that by the time chickens are ready for slaughter many may show abnormalities in the way they walk[11], with one bird in four having a leg problem severe enough to affect its welfare and ability to move around[11]. As lame birds are less active[12, 13] and spend more time in contact with the litter, they are more likely to also suffer from hock and foot pad burn[14].

What can be done to help prevent these problems? Slower growing birds (less than 45g per bird per day) should be selected for meat production[8].

LOW SPACE ALLOWANCE

The amount of space provided per bird is referred to as the stocking density (bird weight per unit area). The number of birds kept within a building can be so high that each bird ends up with little room to move around. For example, a stocking density of 38kg per m^2 equates to 19 x 2kg birds occupying each m^2 of floor space. This stocking density provides only 526cm^2 of space per 2kg bird – less than the size of an A4 sheet of paper (623cm^2), and less space than that provided for a laying hen kept in a cage (550cm^2).

WELFARE CONSEQUENCES OF A LOW SPACE ALLOWANCE:

- behavioural restriction
- breast blisters
- foot pad burn
- hock burn
- lameness
- skin infections.

When stocking density exceeds 30kg per m^2 (15 x 2kg birds per m^2), there is a steep rise in the frequency of serious welfare problems, regardless of the quality of management or the housing specification[7]. A low space allowance (above 30kg per m^2) can result in behavioural restriction[15, 16], which limits the bird's ability to perform natural behaviours such as stretching, wing spreading and walking, because of hindrance from other birds. Less space also limits the opportunity to exercise and less active birds are more prone to lameness[16]. In addition, reduced activity coupled with poor litter quality (caused by a build up of faeces – a further problem associated with high stocking densities) can increase the incidence and severity of painful ammonia (from faeces), burns to the feet (foot pad burn), legs (hock burn) and breast (breast blisters) and cause skin infections[7]. Recent RSPCA-commissioned analysis revealed that as stocking density increased from about 30 to about 38kg per m^2, mortality and the incidence of both hock and foot pad burn also increased[17]. Higher stocking densities can also increase the likelihood of birds becoming heat stressed as well as increase the build up of aerial contaminants that can result in respiratory health issues.

What can be done to help prevent these problems? Stocking density should not exceed 30kg per m^2 [7].

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GOVERNMENT-FUNDED RESEARCH ON STOCKING DENSITY

Government-funded research published in 2004 examined the effect of stocking density on broiler welfare[18]. The study required broiler producers to stock birds to five final-target stocking densities: 30, 34, 38, 42 and 46kg per m^2, although the actual stocking densities achieved were 28, 32, 35, 38 and 40kg per m^2. The study concluded that environmental factors such as temperature, humidity, litter and air quality had a greater impact on welfare than stocking density itself*. However, the following factors were found to be directly affected by stocking density, and were usually affected most significantly at the two highest densities.

- Leg health was significantly affected by actual stocking density. Birds with good leg health (i.e. the best gaits) fell from 81 per cent at the lowest density to 61 per cent at the highest. Subsequently the proportion of birds with gait scores indicating mild to severe leg problems increased from 19 per cent at 30kg per m^2 to 39 per cent at the highest density.
- The incidence of birds observed jostling increased as the actual stocking density increased – occurring twice as often as the density reached 42kg per m^2 (actual 38kg per m^2) compared with the lowest density. Jostle rate was also positively correlated with hock burn.
- The number of strides taken per walking bout was affected by target stocking density and fell from an average five strides at 30kg per m^2 to 3.6 strides at 46kg per m^2. Similarly, the rate of leg stretching was 50 per cent lower at 42kg per m^2 compared to 30kg per m^2.
- The following incidences of behaviour were also affected by actual stocking density:
  - drinking
  - lying stretched out
  - wing stretching.

Of the parameters selected for assessment, stocking density had the greatest effect on behaviour. The conclusion that chicken welfare is influenced more by environmental factors than stocking density is logical to an extent as environmental factors that can lead to severe physical discomfort, and in some cases pain, are likely to have a greater impact on welfare than a degree of behavioural restriction. However, in the absence of such discomfort and pain the amount of space available does significantly affect bird welfare. The authors confirm this, stating that: "We must not, however, conclude that stocking density is unimportant... Although house environment is crucial to bird welfare, we emphasise that stocking density is also important."

To accurately assess the impact of stocking density on welfare it is important to control environmental factors. Industrial trials, whilst involving large numbers of birds, do not always control such confounding variables. An author of the above study supervised another project whereby environmental variables were controlled and stocking density was increased from 34 to 40kg per m^2. In this study, daily mortality, the incidence of leg problems, contact dermatitis, carcass bruising and disturbance whilst resting all increased with stocking density[19]. In addition, both locomotion and litter quality decreased.

The very fact that stocking density has such a direct and significant negative impact on chicken welfare led to the European Commission – Scientific Committee on Animal Health and Animal Welfare (2000) – to conclude in their report on the welfare of broilers that at stocking densities exceeding 30kg per m^2 welfare problems are likely to emerge regardless of indoor climate control and capacity.

* The report presented results for significance levels of $P<0.01$; those significant at $P<0.05$ were not presented.

INADEQUATE LIGHTING

Chickens may be kept in near-constant dim light[20] (about 10 lux – lux being the measurement for light intensity). Such conditions increase feed intake and discourage activity – thus maximising growth rate[21]. The reason for providing dim light is also economic as it reduces electricity use[22].

WELFARE CONSEQUENCES OF INADEQUATE LIGHTING:

- eye abnormalities
- foot pad burn
- hock burn
- lameness.

Keeping chickens in near-constant light prevents them from having a sufficient period of darkness to rest[24]. This encourages faster growth as the chickens will be inclined to eat more (see the welfare problems associated with fast growth rates, page 4).

Welfare problems can also arise when light intensities are below 20 lux[7]. Reduced light levels discourage activity, which can cause an increase in lameness and skin diseases such as hock and foot pad burn[12] and, at very low levels, the development of eye abnormalities[22].

What can be done to help prevent these problems?
At least six hours of continuous darkness should be provided in any 24-hour period to allow birds a proper rest period. During the day, lighting levels should be a minimum of 20 lux[7, 24] to encourage activity.

BARREN ENVIRONMENT

Birds may be kept in buildings with limited opportunities to express natural behaviours such as perching, ground pecking and foraging[7, 20]. Chickens that are provided with an enriched environment are more active – walking and running more and sitting down less – than those kept in sheds without any form of enrichment[25].

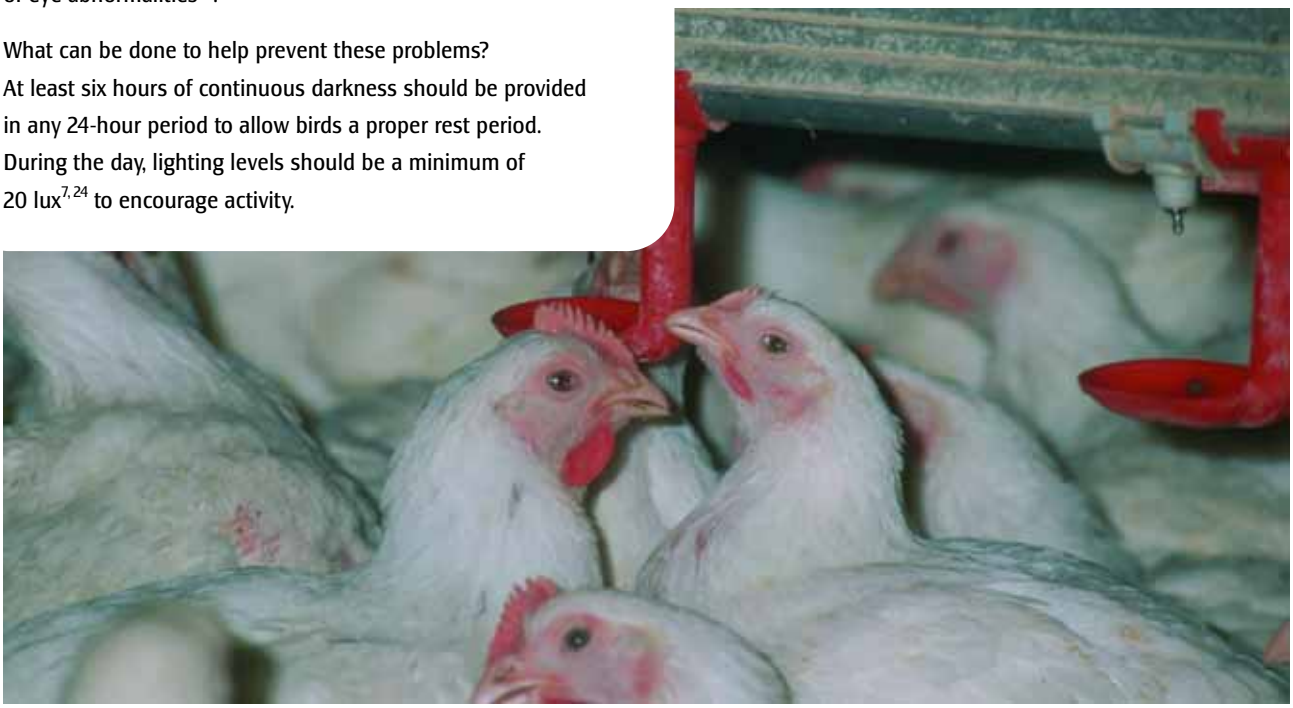
WELFARE CONSEQUENCES OF A BARREN ENVIRONMENT:

- breast blisters
- foot pad burn
- hock burn.

An environment that fails to encourage natural behaviour and increased activity can lead to higher lameness and skin problems such as hock burn, foot pad burn and breast blisters.

What can be done to help prevent these problems?
Chickens should be provided with environmental enrichment items such as straw bales and perches to encourage greater activity and natural behaviour[25].

'Standard' indoor-reared chickens.

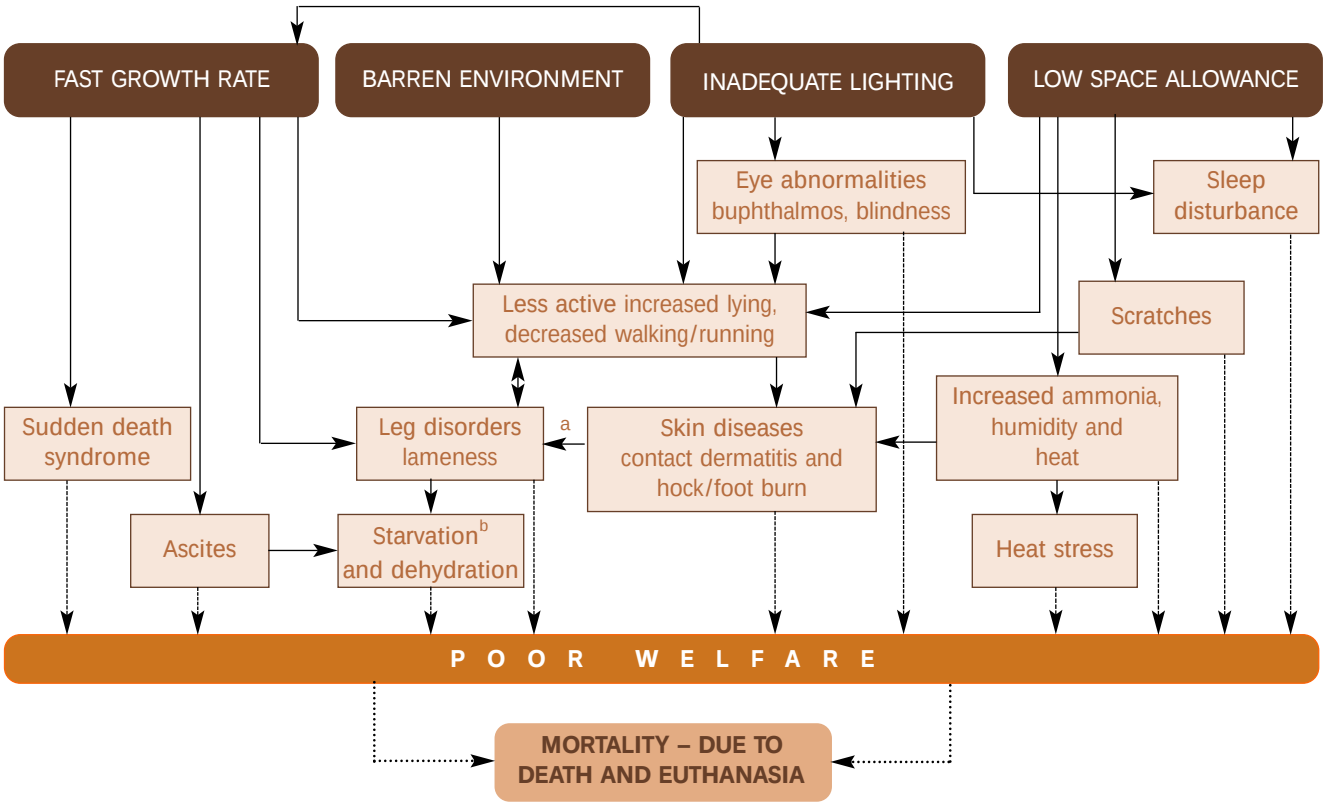


COLIN SEDDON/RSPCA PHOTOLIBRARY

THE IMPACT OF THE KEY WELFARE CONCERNS ON CHICKEN WELFARE

The following diagram illustrates how the four major concerns affecting chicken welfare are linked and how addressing them together – rather than in isolation – is more likely to bring about significant benefits to chicken welfare.

Figure 1: The impact of the key welfare concerns on chicken welfare and the interaction between them



a. Lesions can act as a gateway for infection, which can spread through the bloodstream causing joint inflammations.

b. Owing to physical difficulty in reaching feeders and drinkers.

Figure 1, above, illustrates how a fast growth rate, barren environment, inadequate lighting and high stocking density can result in poor welfare and even mortality. However, these major welfare concerns can be addressed by rearing chickens to higher welfare standards, such as those written by the RSPCA, and by rearing birds in higher welfare systems, such as free-range and organic.

'Standard' indoor-reared chickens.

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ASSURANCE SCHEMES AND STANDARDS

Chickens can be reared according to the standards delivered by an assurance scheme. If all the standards of a particular scheme are fulfilled then a producer can market the chickens with the assurance scheme's logo. Examples of assurance schemes for chickens include Assured Chicken Production ('standard'* chickens) and the RSPCA's Freedom Food scheme (higher welfare chickens). Different assurance schemes address welfare issues to varying degrees.

ASSURED CHICKEN PRODUCTION (ACP)

The scheme providing what is commonly known as 'baseline' assurance in the UK is Assured Food Standards (AFS). AFS manages the Red Tractor logo and its standards, such as those written for ACP – the chicken industry's own assurance scheme which covers more than 90 per cent of UK chicken producers. Birds reared and inspected to ACP standards are labelled with the Red Tractor logo. ACP states that: "Assured Chicken Production (ACP) is an industry-wide initiative that addresses all the important issues concerning the production of chicken. It is an independently assessed assurance scheme designed to deliver confidence to the consumer. Standards have been written to include best practice in food safety, bird health, welfare and traceability". For further information visit: www.assuredchicken.org.uk/chickens

"As a cook, top quality ingredients are very important to me. But just as important is the assurance that the farm animals involved have enjoyed a decent quality of life. That's why welfare labels, like the RSPCA's Freedom Food, are so important, allowing all of us to make a choice for farm animal welfare."

Anthony Worrall Thompson, chef, television presenter and restaurateur (Taken from *Freedom Food Celebrity Recipe Collection*, 1999).

Certification Mark

FREEDOM FOOD

Freedom Food was set up by the RSPCA in 1994 and is unique in being the only welfare focused farm assurance and food-labelling scheme. It is a charity in its own right, non-profit making and entirely independent from the food industry. Unlike any other assurance scheme, for a product to bear the Freedom Food label the animal must have been reared, transported and where relevant slaughtered to RSPCA welfare standards. There are nine separate sets of standards, written for each of the farm animals on the scheme. These have been developed by the RSPCA's farm animal department and are based on scientific research, veterinary advice and practical farming experience. The RSPCA welfare standards for chickens aim to rear chickens to higher welfare standards in all systems of production i.e. indoor, free-range and organic. Approximately 1.7 per cent (14 million) of chickens reared in the UK last year were reared under the scheme. For further information visit: www.freedomfood.co.uk

NB. where both a Red Tractor and a Freedom Food logo appear on a product, the producer must fulfill both sets of standards.

WHY HAVE STANDARDS?

Standards can be set to appropriately and effectively address the key welfare concerns, as discussed on pages 4 to 7. Such standards can bring about benefits not only to bird welfare but also to those who rear, retail and consume them.

*'Standard' is generally the term given to those animals that are reared in the most common agricultural production system and generally denotes the baseline standard as compared to those with additional requirements.

Table 1, below, compares the RSPCA's welfare standards for chickens, which are used by the Freedom Food scheme, with the industry's own (ACP) standards for each of the key issues affecting chicken welfare.

ACP and RSPCA standards have been selected for comparison as most chickens in the UK are reared to ACP standards, whilst the RSPCA's represent higher welfare standards.

Table 1: Comparison of RSPCA welfare standards for chickens with the chicken industry's own assurance scheme standards (ACP) for the key issues affecting chicken welfare

Key welfare issue	RSPCA (labelled Freedom Food)	Chicken industry (ACP) (labelled Red Tractor)
Growth rate (grams per bird per day)	Maximum of 45	No restriction
Space allowance (kg per m^2)	Maximum of 30	Above 38 permitted
Lighting intensity (lux)	Minimum of 20	Minimum of 10
Dark period (hours per day)	Two for around 10 per cent of the chicken's life, otherwise a minimum of six	One for around 40 per cent of the chicken's life, otherwise a minimum of four
Environmental enrichment	Straw bales, perches and pecking objects	None required

From this comparison, it can be concluded that the RSCPA welfare standards for chickens specify:

- a slower growth rate
- more space
- brighter-lit conditions
- a longer night-time period
- a more enriched environment.

For standards to be effective they must help address the welfare issues for which they have been written. To determine how effective both the RSPCA welfare standards for chickens and the ACP standards are at addressing welfare issues, a large data-set of chicken production and welfare indicator measures were analysed. The results are presented in the following section.

ROBIN CULLEY/FREEDOM FOOD

Free-range chicken.

WHY CARE ABOUT CHICKEN WELFARE?

RSPCA-commissioned analysis of a large set of data revealed that rearing chickens indoors according to the RSPCA's standards (chicken labelled with the Freedom Food logo) provides significantly better welfare for a number of parameters compared to rearing chickens indoors to the industry's own (ACP) standards (chickens labelled with the Red Tractor logo)[17].

Whenever the term 'RSPCA chickens' is used throughout this section, it refers to chickens that have been reared to the RSPCA's welfare standards for chickens. Such chickens can be labelled with the Freedom Food logo.

Whenever the term 'ACP chickens' is used throughout this section, it refers to chickens that have been reared to ACP standards, which are the industry's own standards, and labelled with the Red Tractor logo.

THE STUDY

The aim of the analysis was to determine whether rearing chickens to different standards – RSPCA or ACP – would make a measurable difference to their welfare.

A chicken production company reared chickens in similar sized sheds according to either RSPCA (2.4 million chickens) or ACP (10.5 million chickens) standards. The average stocking density for birds reared to RSPCA standards was 29kg per m^2, and 36kg per m^2 for those raised to ACP standards. The producer collected and recorded data over a year-long period (August 2004–August 2005) for a range of routinely collected welfare and production-based indicators. The RSPCA and ACP chickens were reared on an average of 14 and 18 farms, respectively. A total of 192 flocks (a flock refers to one group of birds reared to slaughter age) of chickens were examined (68 RSPCA flocks and 128 ACP flocks). In some cases, the same farm manager was responsible for rearing both RSPCA and ACP chickens. Neither RSPCA nor ACP chickens were subject to thinning (the planned removal of a proportion of birds from a house for slaughter, usually to maintain a required stocking density). The RSPCA and ACP birds were reared to an average age of 50 and 39 days, respectively, and reached an average slaughter weight of 2.0 and 2.2kg. Average growth rates were 39g per day for RSPCA birds and 55g for ACP birds.

The data were independently analysed by Agra CEAS Consulting. The analysis took account of the different number of birds reared in each production system.

RESULTS

All results presented are statistically significant ($P<0.05$).

MORTALITY [a]

Mortality refers to birds that have died (e.g. due to ascites or sudden death syndrome) and been euthanased (e.g. due to leg disorder and those classified as runts) on farms during rearing.

Table 2: Average level (%) of mortality for birds reared to RSPCA and ACP standards

Standards	Average level of mortality (%)	Approximate range[b] (%)
RSPCA (labelled Freedom Food)	1.8	0.4–3.0
ACP (labelled Red Tractor)	5.1	2.0–8.8

The average mortality of RSPCA chickens was 65 per cent lower than that of ACP chickens. Even though farmers rearing RSPCA chickens sometimes experienced mortality levels of up to three per cent, this figure is still considerably lower than the average level of mortality for ACP chickens. Rearing to RSPCA standards entails less risk to the birds in terms of expected mortality rate.

Key standards that can affect levels of mortality are:

- growth rate
- space allowance
- lighting
- environmental enrichment.

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HOCK BURN[a]

This refers to birds that were observed with one or more ammonia burns to the hock (lower leg). The severity was not recorded but can range from skin discolouration (with no or very small and superficial lesions) to ulcers, signs of haemmorrhages, and a swollen hock.

Table 3: Average level (%) of hock burn for birds reared to RSPCA and ACP standards

Standards	Average level of hock burn (%)	Approximate range[b] (%)
RSPCA (labelled Freedom Food)	3.5	0.1–10.0
ACP (labelled Red Tractor)	19.0	4.0–42.0

The average level of hock burn was over 80 per cent lower in the RSPCA chickens compared to ACP birds. In some cases, nearly half the ACP birds experienced hock burn. The analysis demonstrated that rearing birds to RSPCA standards entails considerably less risk to the birds in terms of expected levels of hock burn.

Key standards that can affect levels of hock burn are:

- growth rate
- space allowance
- lighting
- environmental enrichment.

FOOT PAD BURN[a]

This refers to birds that were observed with ammonia burns to the foot. The severity was not recorded, but can range from skin discolouration (with no or very small and superficial lesions) to ulcers, signs of haemmorrhages and a swollen food pad.

Table 4: Average level (%) of foot pad burn for birds reared to RSPCA and ACP standards

Standards	Average level of foot pad burn (%)	Approximate range[b] (%)
RSPCA (labelled Freedom Food)	3.5	0.1–10.0
ACP (labelled Red Tractor)	6.5	0.0–12.0

The average level of foot pad burn was nearly 50 per cent lower in the RSPCA birds. The data also revealed that a high number of farms working to ACP standards had very high levels of foot pad burn (20–37 per cent), suggesting a greater element of risk of birds receiving foot pad burn when working to ACP standards.

Key standards that can affect levels of foot pad burn are:

- growth rate
- space allowance
- lighting
- environmental enrichment.

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BIRDS ARRIVING DEAD AT THE SLAUGHTERHOUSE[a]

This parameter can be affected by many factors, such as journey time and transport-crate stocking density. However, as the producer in question adopted the same standards for transporting both RSPCA and ACP birds, it is likely that the difference in mortality observed was primarily due to differences in the health of the birds.

Table 5: Average level (%) of birds dead on arrival at the slaughterhouse for birds reared to RSPCA and ACP standards

Standards	Average level of birds dead on arrival at slaughterhouse (%)	Approximate range[b] (%)
RSPCA (labelled Freedom Food)	0.05	0.0–0.07
ACP (labelled Red Tractor)	0.17	0.0–0.38

RSPCA chickens are 70 per cent less likely to arrive dead at the slaughterhouse. The range for expected mortality at the slaughterhouse was also very narrow for RSPCA birds compared to that of ACP. The analysis revealed that working to RSPCA standards entails less risk to the birds in terms of expected mortality at the slaughterhouse.

Key standards that can affect the number of birds arriving dead at the slaughterhouse are:

- growth rate
- space allowance
- lighting
- environmental enrichment.

The chicken production company involved reported that they considered the RSPCA birds to have better leg health and be less prone to femoral head necrosis (death of tissue caused by disease or injury around the hip joint). Better leg health is less likely to result in leg damage when catching the birds, which can be a key contributor to mortality during transport.

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SLAUGHTERHOUSE REJECTS [a]

This refers to birds rejected at the slaughterhouse because of problems associated with disease and management on the farm, such as ascites, septicaemia, leg disorders and breast blisters. Such birds are deemed unfit for human consumption.

Table 6: Average level (%) of slaughterhouse rejects for birds reared to RSPCA and ACP standards

Standards	Average level of slaughterhouse rejects (%)	Approximate range[b] (%)
RSPCA (labelled Freedom Food)	1.6	0.3–3.1
ACP (labelled Red Tractor)	1.9	0.3–3.1

Although the data appear to be similar, a smaller proportion of RSPCA birds were rejected at the slaughterhouse. The 0.3 per cent difference amounts to many thousands more birds being rejected each year. For example, an abattoir slaughtering 1 million chickens per week would reject 3,000 fewer birds if they were sourced from farms working to RSPCA standards.

Key standards that can affect levels of slaughterhouse rejects are:

- growth rate
- space allowance
- lighting
- environmental enrichment.

SUMMARY

From this research it can be concluded that the RSPCA welfare standards for chickens provide significantly better animal welfare compared to ACP standards in terms of:

- lower mortality [a]
- lower percentage of birds with hock burn [a]
- lower percentage of birds with foot pad burn [a]
- lower percentage of birds dead on arrival at the slaughterhouse [a]
- lower percentage of rejects at the slaughterhouse [a].

The differences between these welfare parameters are particularly interesting considering the slower–growing RSPCA birds were reared for an additional 11 days to achieve the desired slaughter weight.

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a. This parameter can be influenced by space allowance. Therefore the observed difference between the RSPCA and ACP standards in general is likely to be greater than found in this study, as the company involved stocked the ACP birds at a considerably lower density (36kg per m^2) than is typical for the scheme (about 42kg per m^2).

b. Range figures do not include outliers (an observation that lies an abnormal distance from other values in a random sample from a population) greater than 1.5 x the inter-quartile range.

WHY CARE ABOUT CHICKEN WELFARE?

It's good for the producer

Higher welfare can result in economic benefits for the producer. As evidenced by the results presented in the previous section, rearing chickens to the RSPCA's higher welfare standards offers a financial advantage as a result of:

- significantly lower mortality
- significantly fewer birds arriving dead at the slaughterhouse
- significantly fewer birds being rejected at the slaughterhouse.

Additional economic benefits can arise from rearing birds to higher welfare standards. A further aim of the analysis was to determine whether there were any differences to production parameters between rearing chickens to RSPCA versus ACP standards.

Whenever the term 'RSPCA chickens' is used throughout this section, it refers to chickens that have been reared to the RSPCA's welfare standards for chickens. Such chickens can be labelled with the Freedom Food logo.

Whenever the term 'ACP chickens' is used throughout this section, it refers to chickens that have been reared to ACP standards, which are the industry's own standards, and labelled with the Red Tractor logo.

RESULTS

All results presented are statistically significant ($P<0.05$), unless otherwise stated.

GRADE A BIRDS

Birds that are classified at the slaughterhouse as top grade, or grade A, i.e. of the highest quality, are suitable for sale as whole birds. Downgraded birds (i.e. graded below grade A) cannot be sold as whole birds because parts of the bird have to be removed. Birds can be downgraded for a variety of reasons including bruising, skin blemishes, wing and leg damage, broken limbs and femoral head necrosis.

Table 7: Average level (%) of birds graded 'A' for birds reared to RSPCA and ACP standards

Standards	Average percentage of grade A birds (%)	Approximate range[a] (%)
RSPCA (labelled Freedom Food)	83.4	78.0–92.0
ACP (labelled Red Tractor)	66.2	50.0–90.0

Rearing to RSPCA standards provided an average 26 per cent more grade A birds. The percentage of grade A birds for farmers rearing chickens to ACP standards was at times as low as 50 per cent. The comparable figure for farmers working to RSPCA standards was 78 per cent. This means that there is more risk of failing to rear grade A chickens if working to ACP standards.

Key standards that can affect the percentage of grade A birds:

- growth rate
- space allowance
- environmental enrichment.

FEED PER BIRD

This represents the amount of feed provided per bird to reach its desired slaughter weight.

Table 8: Average amount of feed (kg) provided per bird for birds reared to RSPCA and ACP standards

Standards	Average amount of feed provided per bird (kg)	Approximate range[a] (%)
RSPCA (labelled Freedom Food)	4.1	3.6–4.5
ACP (labelled Red Tractor)	3.8	3.4–4.2

RSPCA chickens are provided with more food on average than ACP chickens. However, this calculation does not take mortality into account. If mortality is considered, the difference between the average values will be less as mortality was significantly greater for the ACP birds – which means that fewer birds would be left in the flock so more feed would have been eaten per bird. The result shown in Table 8 was expected as the RSPCA birds are slower growing and take on average 11 days longer to reach the desired weight for slaughter (50 versus 39 days for ACP birds). They also have more room and opportunity to express active behaviours such as running and dustbathing, which can use more energy.

MEAT ON CARCASS

There was no significant difference in the average percentage of meat on the carcass between chickens reared to RSPCA and ACP standards, with chickens reared to both standards achieving approximately 71 per cent.

FEED CONVERSION RATIO (FCR)

FCR refers to the amount of feed required to produce one kilogram of chicken.

Table 9: Average amount of feed (kg) required to produce 1kg of chicken for birds reared to RSPCA and ACP standards

Standards	Average amount of feed required to produce 1kg of chicken (kg)	Approximate range[a] (%)
RSPCA (labelled Freedom Food)	2.0	1.9–2.1
ACP (labelled Red Tractor)	1.8	1.7–1.9

RSPCA chickens require more food on average to produce 1kg of chicken than ACP chickens. The reasons for this are similar to those for the amount of feed provided per bird, page 15.

SUMMARY

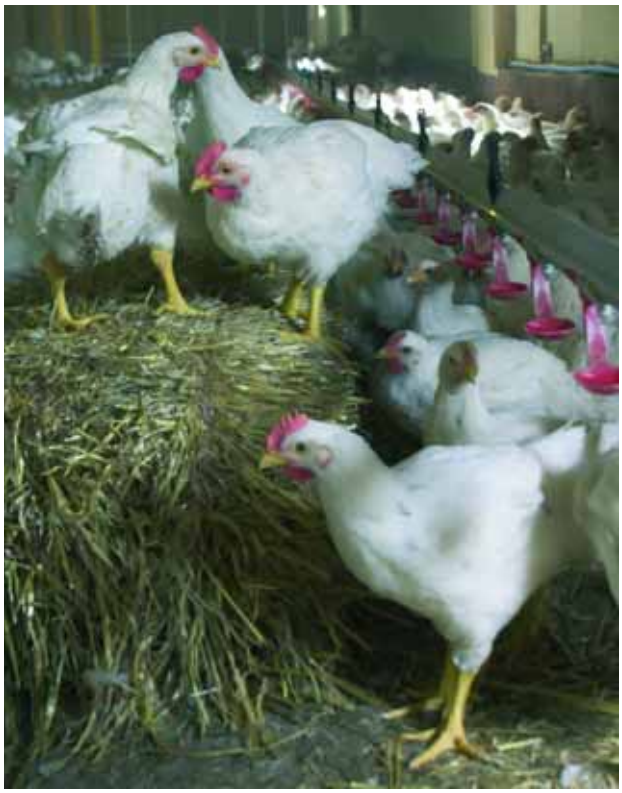
- The RSPCA welfare standards produced on average 26 per cent more grade A birds.
- On average, RSPCA chickens consume more feed and have a higher FCR than ACP chickens. These results were expected as RSPCA birds are reared for a longer period and have more space and opportunity to exercise. However, the difference observed between these parameters will be less if mortality is taken into account, which was significantly greater for the ACP birds.

WHAT DO THESE RESULTS MEAN ON THE FARM?

Based on the results of the analysis, the following two tables illustrate what the RSPCA and ACP standards can deliver in practice. Based on the data presented in the tables, calculations have been made to illustrate the possible financial implications of rearing birds to the two different standards.

As the permitted stocking density between the RSPCA and ACP standards is different, and therefore the number of birds reared within a shed of the same size will be different, shed size has been kept the same for both the RSPCA and ACP chickens in Table 10. In Table 11 on the other hand, shed size has been varied so that the same number of birds are reared in each shed.

Freedom Food indoor-reared chickens.



ANDREW FORSYTH/RSPCA PHOTOLIBRARY

a Range figures do not include outliers (an observation that lies an abnormal distance from other values in a random sample from a population) greater than 1.5 x the inter-quartile range.

Table 10: The differences between rearing birds to RSPCA and ACP standards for each of the welfare and production parameters

NB. shed size has been kept the same for both RSPCA and ACP birds, therefore, owing to the different stocking densities employed, there are different numbers of birds in each shed.

Parameter	RSPCA (labelled Freedom Food)	ACP (labelled Red Tractor)	RSPCA compared to ACP
Shed size (m^2)	1315.8	1315.8	No difference
Weight birds reared to (kg)	2	2	No difference
Stocking density (kg/m^2)	30	38	-8
Number of birds per m^2	15	19	-4
Number of chicks placed in shed	**19,737**	**25,000**	**-5,263**
Age at slaughter (days)	50	39	+11
Welfare parameter			
Number of birds with hock burn	691 (3.5%)	4,750 (19%)	-4,059
Number of birds with foot pad burn	691 (3.5%)	1,625 (6.5%)	-934
Production parameter			
Total amount of feed provided (kg)	79,466 (4.1kg/bird)	90,155 (3.8 kg/bird)	-10,689
On-farm mortality (number of birds)	355 (1.8%)	1,275 (5.1%)	-920
Number of birds arriving dead at the slaughterhouse	10 (0.05%)	40 (0.17%)	-30
Number of birds rejected at the slaughterhouse	310 (1.6%)	450 (1.9%)	-140
Total losses	**675**	**1,765**	**-1,090**
Remaining number of birds	19,062	23,235	-4,173
Number of birds graded A	**15,898 (83.4%)**	**15,382 (66.2%)**	**+516**
Number of birds graded lower than grade A	3,164	7,853	-4,689

In this scenario, even if more than 5,000 fewer birds were reared to RSPCA standards (owing to the lower stocking density permitted under the scheme), over 500 more birds would be graded A compared to ACP standards. This difference would have a significant impact on revenue as grade A birds attract a higher price. In addition, over 1,000 more birds would not reach slaughter age under ACP standards.

According to the data presented in Table 10, if it is assumed that chicks are bought for the same price (20p each), grade A birds are sold for the same price (say £1.30 each) and feed is bought at £130 per tonne, then this would result in an ACP producer potentially losing £3,112.97 compared to an RSPCA producer. This figure is based on the production of grade A birds and does not include calculations for birds graded lower than A. This loss is likely to be greater as birds reared to higher welfare standards can fetch a price premium.

It's good for the producer

Table 11: The differences between rearing birds to RSPCA and ACP standards for each of the welfare and production parameters

NB. shed size has been adjusted so that the same number of birds could be reared in each shed under both RSPCA and ACP standards.

Parameter	RSPCA (labelled Freedom Food)	ACP (labelled Red Tractor)	RSPCA compared to ACP
Shed size (m^2)	1666.7	1315.8	+350.9
Weight birds reared to (kg)	2	2	No difference
Stocking density (kg/m^2)	30	38	-8
Number of birds per m^2	15	19	-4
Number of chicks placed in shed	**25,000**	**25,000**	**No difference**
Age at slaughter (days)	50	39	+11
Welfare parameter			
Number of birds with hock burn	875 (3.5%)	4,750 (19%)	-3,875
Number of birds with foot pad burn	875 (3.5%)	1,625 (6.5%)	-750
Production parameter			
Total amount of feed provided (kg)	100,655 (4.1kg/bird)	90,155 (3.8 kg/bird)	+10,500
On farm mortality (number of birds)	450 (1.8%)	1,275 (5.1%)	-825
Number of birds arriving dead at the slaughterhouse	12 (0.05%)	40 (0.17%)	-28
Number of birds rejected at the slaughterhouse	393 (1.6%)	450 (1.9%)	-57
Total losses	**855**	**1,765**	**-910**
Remaining number of birds	24,145	23,235	+910
Number of birds graded A	**20,137 (83.4%)**	**15,382 (66.2%)**	**+4,755**
Number of birds graded lower than grade A	4,008	7,853	-3,845

In this scenario, if the same number of birds were reared to each set of standards more than 900 extra birds would reach slaughter age under RSPCA standards, primarily due to the lower mortality rate. In addition, rearing birds to RSPCA standards would produce 4,755 more grade A birds compared to ACP standards. This difference would have a significant impact on revenue, as grade A birds attract a higher price.

According to the data presented in Table 11, if it were assumed that chicks are bought for the same price (20p each), grade A birds are sold for the same price (say £1.30 each) and feed is bought at £130 per tonne, this would result in an ACP producer potentially losing £4,816.50 compared to an RSPCA producer. This figure is based on the production of grade A birds and does not include calculations for birds graded lower than A. This loss is likely to be greater as birds reared to higher welfare standards can fetch a price premium.

The worked examples clearly illustrate the savings that can be made by rearing birds to RSPCA welfare standards. The success and continued growth of the Freedom Food scheme is demonstration in itself that not only is working to higher welfare standards achievable in commercial farming practice, but can also be a profitable venture.

INTERVIEWS WITH STOCK-KEEPERS

The economics of production is an important consideration to the farmer, but this is only one factor that affects him or her. The stock-keeper's working environment and the welfare of the birds also have an impact on the stock-keeper on a daily basis. Two stock-keepers who have been rearing chickens for many years were interviewed in May 2006 to determine what they thought about rearing birds both to ACP and RSPCA standards from an economic, a working-environment and a chicken welfare perspective. One stock-keeper has recently started rearing birds to RSPCA standards whilst the other has been rearing birds to RSPCA standards for about two years. Both stock-keepers are members of the Freedom Food scheme.

MR IVAN HAYWARD, NEAR SHAFTESBURY, DORSET

Mr Hayward is a contract grower and has been growing 'standard' chickens for 30 years. He converted entirely to rearing chickens to RSPCA standards approximately six months before this interview.

WHY DID YOU DECIDE TO REAR CHICKENS TO RSPCA STANDARDS?

"I saw an advert asking for chicken growers to rear to the RSPCA's welfare standards and decided it would be a good opportunity. A key decision factor was that the standards worked to a lower stocking density, which is better for the birds. I was also hoping to receive fairer returns."

WHY DID YOU STOP REARING BIRDS TO ACP STANDARDS?

"I reared standard birds for 30 years, but then became disillusioned with the industry. I wasn't happy with the way it was going with the birds. A particular worry was the high stocking density – especially during the summer months. I now only rear Freedom Food birds. It's much nicer to see them with more room and expressing their natural behaviour. I also find it less stressful working to these standards."

WHICH IS MORE PROFITABLE – REARING BIRDS TO ACP OR RSPCA STANDARDS?

"I haven't done enough crops yet to determine this, but I think I will make more money out of producing Freedom Food birds. At the moment I seem to be making about the same amount of money, but I'm growing fewer chickens, with less stress and a greater sense of job satisfaction."

WAS THERE ANY COST INVOLVED IN CONVERTING FROM ACP TO RSPCA STANDARDS?

"The cost of conversion was negligible, and it was very straight forward. I already had the chicken houses. I had to improve the birds' living space by adding the enrichment items, which I did for under £50."

DOES WORKING TO RSPCA STANDARDS AFFECT YOUR JOB AS A STOCK-KEEPER, COMPARED TO WORKING TO ACP STANDARDS?

"Yes. I look forward to working on the farm. I have much less mortality – no-one likes culling birds or picking up dead ones. The floor litter remains dry, and I haven't needed to use any antibiotics on these birds, which I had to use on the standard birds. I'd say it's a far better way of producing chicken – it provides a much better working environment, it's easier to inspect the birds and I'm a happier stockman."

WHICH STANDARDS DO YOU CONSIDER TO BE MORE BENEFICIAL TO CHICKEN WELFARE – ACP OR RSPCA?

"The chickens are much happier and in much more pleasant surroundings under RSPCA standards. They have more space to move around and they don't have a problem with their legs. I had great problems with hock burn when I was producing to ACP standards, now there seems hardly any birds affected."

WOULD YOU LIKE TO CHANGE THE WAY YOU REAR CHICKENS TO RSPCA STANDARDS?

"I am happy with the RSPCA standards."

DO YOU HAVE ANY OTHER COMMENTS?

"I've always said I want to be confident enough to show people how I rear chickens, but with standard chickens it got to the stage where this was no longer the case. Now, rearing Freedom Food chickens, I'm happy again to have people look around. I always felt that if you're happy to show the general public what you're doing, then you're being fair to the chickens.

"I'm not knocking farmers. You can ask any farmer and they would say that they want to be rearing chickens the way I am, but they are forced to work to lower standards. It's a competitive market, and if farmers don't rear chickens to the way retailers demand then the retailer will go to someone else. Most consumers buy on price so chickens are grown to meet the low price expected, and the retailers drive this. We need to educate both the public and retailers so that a better price is paid for a better quality product."

It's good for the producer

MR ROBERT LANNING, DEVONSHIRE POULTRY, NEAR HONITON, DEVON.

Mr Lanning has been growing chicken for 12 years and is a contract grower and director of his own company – Devonshire Poultry. He currently rears about two million birds per year both to ACP and RSPCA standards. At the time of this interview he had been rearing chickens to RSPCA standards for around two years and was looking to expand his production of Freedom Food birds by investing £300,000 in two new buildings later this year.

WHY DID YOU DECIDE TO REAR CHICKENS TO RSPCA STANDARDS?

"Because there was the market to supply such birds and I wanted to rear chickens this way. The standards allow me to rear birds to a much lower stocking density and rear slower growing chickens – two key issues that I feel make a big difference to both chicken welfare and my working environment. I realised that producing higher welfare chicken offered a point of differentiation from standard."

WHY DO YOU STILL REAR BIRDS TO ACP STANDARDS?

"Simply because there isn't the market growth to convert entirely to Freedom Food just yet – I need retailers to stock more Freedom Food birds so I can rear all my birds to RSPCA standards. I think all farmers would like to rear their birds this way."

WHICH IS MORE PROFITABLE – REARING BIRDS TO ACP OR RSPCA STANDARDS?

"I'm marginally better off producing chickens to RSPCA standards, but there's not much in it. However, I get to rear fewer chickens to a higher standard – which is better for them and me – and get a slightly better return."

WAS THERE ANY COST INVOLVED IN CONVERTING FROM ACP TO RSPCA STANDARDS?

"There was very little cost involved in changing from ACP to RSPCA standards. I had to put in some straw bales, perches and pecking objects, but these were not expensive."

DOES WORKING TO RSPCA STANDARDS AFFECT YOUR JOB AS A STOCK-KEEPER, COMPARED TO WORKING TO ACP STANDARDS?

"Yes. It has increased my job satisfaction and provided me with a better working environment. For example, I'm hardly culling any lame birds or picking up dead ones, which are unfortunately fairly routine jobs with standard production. Due to the lower stocking density I also have more space to work in and inspect my chickens. It feels good to be doing something different. If there's a better working environment for me, it's also better for the chicken – there's a knock-on effect."

WHICH STANDARDS DO YOU CONSIDER TO BE MORE BENEFICIAL TO CHICKEN WELFARE – ACP OR RSPCA?

"The RSPCA standards. They only allow slower growing chickens to be reared and provide the birds with more space and an enriched environment, which are big benefits to chicken welfare. I don't get the leg issues that I do with standard birds, and mortality is considerably lower as is the number of factory rejects. I have never had a litter problem with the Freedom Food birds – another benefit of the lower stocking density. When working to the ACP standards I find the summer months a real worry because the higher stocking density increases the risk of heat stress."

WOULD YOU LIKE TO CHANGE THE WAY YOU REAR CHICKENS TO RSPCA STANDARDS?

"Yes. Economics aside, I would like to further decrease stocking density – providing the chickens with even more space. I would like to add windows so they have natural daylight and add more perching facilities and straw bales for enrichment. However, whilst chicken continues to be sold as a cheap commodity and retailers continue to support this, then expanding on these provisions is just not economically viable."

DO YOU HAVE ANY OTHER COMMENTS?

"Working to the RSPCA's higher welfare standards is the start of making the move to putting the chicken first. Retailers need to pay more to their suppliers so they can rear chicken to higher welfare standards. I think all farmers would like to rear their chickens to higher welfare standards."

WHY CARE ABOUT CHICKEN WELFARE?

It's good for the retailer and other food outlets

A public opinion poll showed that 78 percent of people feel that meat chickens are kept in poor or very poor conditions[29]. As a result of this attitude and an increase in awareness about how the majority of chickens are reared, most consumers questioned (72 per cent) regard animal welfare as an important consideration when they purchase chicken[30]. In fact, research has shown that a third of Europeans are buying fewer animal products these days because they are not satisfied with their welfare[31].

Food outlets could benefit by addressing consumer concerns by stocking and promoting higher welfare products. Unexploited demand for higher welfare goods can represent lost earnings.

SATISFYING CONSUMER CONCERN

Most consumers who buy chicken (83 per cent) stated in a recent poll that they expect the retailer to ensure that all the chickens they sell are reared to higher welfare standards[30].

Another poll[29] revealed that when consumers enter supermarkets they are:

- concerned about animal welfare
- particularly concerned about meat chicken welfare
- looking for welfare friendly products
- willing to pay more for them.

Of the consumers who usually purchase higher welfare chicken, 45 per cent stated that they would be disappointed or frustrated if they could only buy chicken that was reared to lower welfare standards, and 43 per cent said they would not buy the lower welfare option if the higher welfare option was not available[30]. Half of those surveyed also said they would be likely or quite likely to move retailer if they were not offered a higher welfare alternative, which further supported the results of a similar study[26].

The power of clear and informative labelling should not be underestimated. Consumers care about animal welfare and want to make an informed purchasing decision. The main barrier to consumers purchasing animal welfare products is not cost, but reported to be a lack of information followed by a lack of availability – cost was rated fifth[32]. In fact, in a survey, 55 per cent of consumers who were currently not purchasing ethically, but showed an interest in higher welfare products, said they would be prepared to pay up to 10 per cent more for them[26]. In its recent report on welfare labelling, the UK government's advisory body – the Farm Animal Welfare Council (FAWC) – called on the government to press at EU level for mandatory labelling on animal welfare grounds for all animal-based products[33].

INCREASED SALES

The growing concern over animal welfare has been reflected in consumer purchasing. For example, the increase in the number of chickens reared under the Freedom Food scheme – from 6.5 million in 2004 to a predicted 17 million in 2006 – demonstrates the growing demand for a higher welfare product. Some retailers have already exploited this demand and been rewarded with year-on-year sales of Freedom Food labelled chicken increasing by up to 105 per cent[34].

TIM SAMBROOK/RSPCA PHOTOLIBRARY

Similarly, the rise in sales of free-range and organic chicken shows the growing consumer demand for such products. In one leading supermarket, the number of free-range chickens sold in its stores is increasing by 25 per cent year-on-year[35]. This demonstrates that in line with an increase in public concern for animal welfare, consumers are increasingly demanding chicken that has been produced to higher welfare standards – and are willing to pay for it.

The alternative higher welfare market as a whole is growing, with the number of chickens reared last year in the UK up in 2005 by approximately 65 per cent – from about 15 million in 2004 to about 25 million in 2005. Last year the higher welfare market accounted for approximately three per cent of chicken production – 1.70 per cent Freedom Food* (which includes Freedom Food free-range), 1.09 per cent free-range** and 0.14 per cent organic***.

A recent poll has shown that the increase in sales of higher welfare chicken may be due to several factors such as concerns over food safety and the perception that it is healthier, of a higher quality and tastes better[26]. See pages 23–24 to read what consumers have to say about these factors.

MAKING CONSUMERS FEEL GOOD

Enabling consumers to shop for what they feel is better-produced food can make them feel good. This view was expressed in a recent survey[30] in which 34 per cent of people said they purchase higher welfare chicken (Freedom Food, free-range or organic) because it makes them feel good about supporting higher welfare systems. Others (62 per cent) bought it to address their concern about how chickens are farmed.

This finding supports the results of another survey where 85 per cent of those who could identify welfare friendly goods on the shelf believed they could improve animal welfare through their purchases[31]. The retailers have the power to fulfill this belief by stocking and clearly labelling higher welfare products. The consumer will then be able to make an informed choice and know they are contributing to improving welfare standards.

ANDREW FORSYTH/RSPCA PHOTOLIBRARY

* Figure supplied by Freedom Food Ltd.

** Estimate based on production data from the four largest UK free-range producers.

*** Figure from the Department for Environment, Food and Rural Affairs. *Organic Statistics United Kingdom* (online). June 2005. Defra, London. Available from: http://statistics.defra.gov.uk/esg/statnot/ppntc.pdf (accessed March 2006).

WHY CARE ABOUT CHICKEN WELFARE?

In summer 2005 the BBC's *Full on Food* programme set out to compare the rearing methods and taste of three different types of chicken – standard, organic and Freedom Food barn-reared. On visiting the Freedom Food chicken farm, presenter and chef Merilees Parker said: "I'm amazed that I feel really comfortable in here… watching a few of them pecking, flapping around and playing. I never thought I would feel this way in an environment like this. I have to say this is a first for me".

She remarked that because the chicken was: "Fed well, running around and reared over time, it should taste a lot better". Merilees went on to cook in front of a studio audience using the Freedom Food chicken, which was then tried and tested by food and drink journalist Richard Johnson who said: "All credit to you, I think the Queen would have loved it".

TASTE AND QUALITY

In a recent survey, consumers who purchased Freedom Food products said they believe higher welfare products will taste better (56 per cent) and be of higher quality (70 per cent)[26]. Supporting this, Henrietta Green, a food writer, broadcaster and founder of Food Lovers, firmly believes that good welfare is one of the essential components of good, tasty food. After visiting a Freedom Food approved chicken farm earlier this year, Henrietta sampled a cooked Freedom Food corn-fed chicken and stated: "The bird tasted excellent... The texture was also good – with firm meat that didn't turn to cotton wool in the mouth, as the meat from so many of the standard-reared broiler birds does".

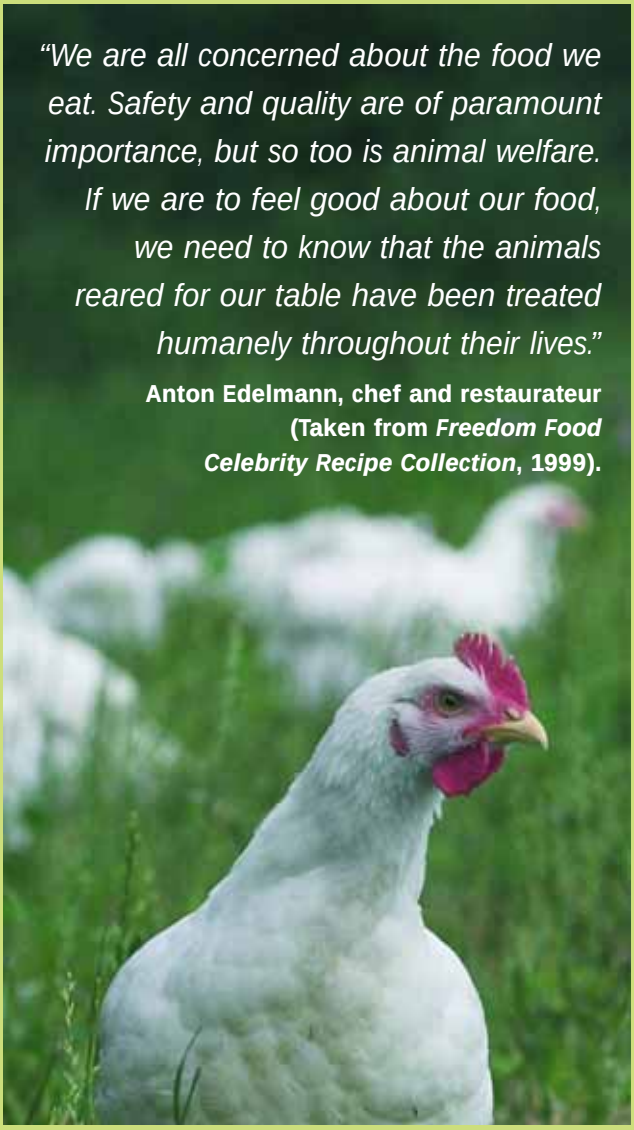
FOOD SAFETY

Recent independent research has supported a link between stress in chickens and human health[27]. Stressed chickens are more susceptible to infection from harmful pathogens, which are responsible for many thousands of cases of human food poisoning each year.

While some food poisoning is down to poor food handling, the majority is caused by infected animals[27]. Research has speculated that, based on the link between welfare and pathogen infection, chickens reared under higher welfare are more resistant to infection from harmful pathogens[28].

When polled, 83 per cent of European consumers believed that producing food under higher conditions of animal welfare would result in better food safety[29], and in another poll 49 per cent of consumers purchasing Freedom Food products believed them to be safer to eat[26].

Free-range organic chickens.



ANDREW FORSYTH/RSPCA PHOTOLIBRARY

It's good for the consumer

THE FEEL-GOOD FACTOR

Shopping for what consumers perceive to be better produced food can make them feel good. This was the result of a recent survey[30] where 34 per cent of consumers stated that they buy higher welfare chicken (Freedom Food, free-range or organic) because it makes them feel good about supporting higher welfare systems. Others (62 per cent) purchased it to address their concern about how chickens are farmed.

In a similar survey[26], 64 per cent of consumers when asked about animal welfare identified their main area of concern as an animal having sufficient space to move around. A consumer buying Freedom Food labelled, free-range or organic chicken can feel satisfied that this key area of concern has been addressed.

SATISFYING CONCERN

Consumers are able to address their concerns about chicken welfare and make a difference to the way chickens are produced – when purchasing a product the consumer is supporting the standards under which that animal was raised.

It is now possible to buy chicken reared to higher welfare standards in every supermarket. Freedom Food barn-reared chicken (which is corn-fed), for example, is stocked in Sainsbury's, Asda, Somerfield, Morrisons and Budgens, while Freedom Food free-range chicken is stocked in Co-op, Fresh & Wild and Selfridges.

If higher welfare products are purchased, retailers and other food outlets will be encouraged to stock more of them and producers will rear more animals to higher standards. This knock-on effect will help bring higher welfare standards to more farm animals. This is evidenced by the growth in the number of chickens reared for meat under the Freedom Food scheme – increasing from 6.5 million in 2004 to a predicted 17 million in 2006.

COST

The price paid for a chicken reared to higher welfare standards may be only slightly higher than that paid for a standard chicken. For example, the Freedom Food labelled barn-reared chicken costs from only 84p per kg more than a standard chicken from the same supermarket* – a small price to pay for helping to provide the chickens with more space, a healthier life[17] and a more interesting and stimulating environment. So those consumers looking for a higher welfare choice may find it's a budget friendly choice too.

Free-range organic chicken.

ANDREW FORSYTH/RSPCA PHOTOLIBRARY

* The cost of a standard chicken is calculated by averaging the price of a medium, whole, fresh chicken taken from the top four supermarkets during June 2006.

SUMMARY

There are four main groups to consider when rearing chickens for meat – the chickens themselves, the producers, the retailers and the consumers. This report provides evidence to support the contention that rearing chickens to higher welfare standards can be mutually beneficial to all of these groups.

THE CHICKEN

- The adoption of higher welfare standards can significantly improve chicken welfare. For example, RSPCA-commissioned analysis of a large set of data revealed that compared to rearing birds to the industry's own standards, rearing chickens according to the RSPCA's welfare standards for chickens resulted in lower mortality, a lower percentage of birds with hock and foot pad burn, and a lower percentage of birds arriving dead at the slaughterhouse.

THE RETAILER

- By stocking higher welfare products, and therefore addressing consumer concern, retailers could benefit from increased sales and custom. Polling revealed that some consumers would be disappointed or frustrated if they could only buy chicken that was reared to lower welfare standards, and some said they would not buy the lower welfare option if the higher welfare option was not available. Others said they would be likely or quite likely to move retailer if they were not offered a higher welfare alternative.

THE PRODUCER

- The application of higher welfare standards can result in economic benefits to the chicken production company as a result of lower mortality, fewer birds arriving dead at the slaughterhouse, fewer birds being rejected at the slaughterhouse and a greater proportion of grade A birds. For example, using the results of RSPCA-commissioned data analysis, if 25,000 birds were reared to the RSPCA's higher welfare standards and the same number to the industry's own standards, more than 900 extra birds would reach slaughter age under the RSPCA standards (primarily owing to a lower mortality) and 4,755 more grade A birds would be produced.
- The interviewed stock-keepers, who rear birds to higher welfare standards, stated that they are happier, look forward to working on the farm, find the job less stressful and achieve a greater sense of job satisfaction.

THE CONSUMER

- Providing higher welfare products can help address the concerns of consumers and allows them the opportunity to support higher welfare standards through their purchase.
- The opportunity to purchase higher welfare products could contribute to psychological well-being as consumers surveyed stated that purchasing higher welfare chicken makes them “feel good” about supporting higher welfare systems.
- Consumers may benefit from improved food safety as chickens reared with higher welfare have been reported to be more resistant to infection from harmful pathogens that can lead to food poisoning.

The report presents evidence to show that there are clear benefits to all when chickens are reared to higher welfare standards. The responsibility to make improvements to chicken welfare and reap the benefits lies not only with the industry itself but also with those that retail and consume it. The government also bears responsibility, since the requirement for strong legislation that makes the necessary changes to improve chicken welfare is evident. Thus, we all share a responsibility to ensure our food is produced in a way that does not unnecessarily compromise animal welfare.

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