

FRC Food Brexit Briefing

A better Brexit for farm animals:
What the Government must do to protect welfare standards

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Summary

Brexit provides real opportunities to improve farm animal welfare standards and ministers at the Department for Environment, Food and Rural Affairs are committed to achieving such improvements.

However, Brexit also presents threats to welfare. Influential voices argue in favour of diluting UK standards in order to facilitate trade deals, unilaterally removing import tariffs and ending farm subsidies. Such moves would lead to UK farmers being undermined by lower welfare imports. If the UK cannot protect them from such imports, farmers may, understandably, resist welfare improvements and may even press for existing welfare standards to be lowered. Accordingly, trade will be paramount among the factors that will determine whether the opportunities for improving welfare can be realized.

Other key factors determining the post Brexit level of welfare include:

- Subsidies: farmers should receive support for attaining high welfare standards;
- Consumers: mandatory labelling of meat and dairy products to indicate production system is needed so that consumers can play their part in driving welfare improvements;
- Public procurement: this should promote the highest standards of welfare; this is already a requirement in Scottish law.

Recommendations

- 1 When negotiating new trade agreements, including with the EU and the US, the UK should insist on the inclusion of a clause allowing the UK to require imports to meet UK standards of farm animal welfare. Alternatively, the UK could press for the ability to place differential tariffs on imports. Imports that do not conform to UK welfare standards would be subject to tariffs that are sufficiently high to safeguard UK farmers; imports that meet UK standards would benefit from a low or zero tariff.
- 2 Accordingly, legislation on trade is needed to:
 - a. ensure that the UK does not conclude any new trade agreement that compels it to allow the import of products produced to standards of animal welfare lower than those of the UK;
 - b. give Parliament a decisive role in setting the goals of trade agreements and in their negotiation and conclusion.
- 3 The Taxation (Cross-border Trade) Bill sets out factors to which the Treasury must have regard in setting the rate of import duties. The Bill should be amended to add to these factors (i) the interests of producers including farmers and (ii) the desirability of maintaining UK standards of animal welfare.

- 4 The Agriculture Bill – and similar legislation in Scotland, Wales and Northern Ireland – should:
 - a. establish the principle that post-Brexit subsidies are primarily to be granted for public goods. It should expressly recognise high standards of animal welfare and food safety as public goods;
 - b. introduce mandatory labelling of meat and dairy products as to method of production;
 - c. require public procurement to promote the highest standards of animal welfare.
- 5 The Agriculture Bill should prohibit the export of live animals for slaughter or fattening.
- 6 The Welfare of Farmed Animals Regulations in all four parts of the UK should be amended to:
 - a. phase out enriched cages and farrowing crates;
 - b. require dairy cows to be kept on pasture during the grass-growing season;
 - c. decrease the maximum permitted stocking density for broiler chickens to 30 kg/m² and require the use of slower-growing breeds.
- 7 Where no trade agreement has been concluded, trade will be governed by the WTO rules. Policy-makers still often assert that the WTO rules do not permit trade restrictions to be made on animal welfare grounds. However, WTO case law since 2001 indicates that in certain circumstances a country may require imports to meet welfare standards equivalent to its own, provided there is no element of discrimination. The UK should adopt a less cautious approach than its current position and be prepared to recognise that it may, depending on the circumstance of each particular case, require imports to meet welfare standards equivalent to its own.
- 8 The Government has proposed an Animal Welfare Bill to recognise animals as “sentient beings” and to require ministers to pay regard to welfare when formulating and implementing policy. The Bill’s purpose is to bring Article 13 of the Treaty on the Functioning of the EU into domestic law. There is currently much discussion on the terms of the Bill. However, whatever terms are finally adopted, it is important that this Bill becomes law as it will help entrench welfare as a matter that must be given due weight in post-Brexit policy-making.

Why Brexit matters for Animal Welfare

Whether or not Brexit will generate improvements in the welfare of UK farm animals remains unclear. The threats and opportunities remain finely balanced.

Opportunities provided by Brexit

The Prime Minister, the Secretary of State for Environment, Food and Rural Affairs, Michael Gove, and the Minister of State for Agriculture, George Eustice, have indicated that they are all committed to maintaining and, where possible, improving standards of welfare in the UK.^{1,2,3} A Written Ministerial Statement refers to the Government's ambition to "set a global gold standard for animal welfare as we leave the EU".⁴ However, future trade deals may make these ambitions very difficult to realise in practice.

Threats posed by Brexit

Trade is likely to be one of the most important determinants of the level of post-Brexit farm animal welfare. If, when concluding new trade deals – with the EU, the US or others – the UK is not able to protect farmers from lower welfare imports, farmers may, understandably, resist welfare improvements and may even press for existing welfare standards to be lowered.

Key determinants of post-Brexit standards of animal welfare

A number of key factors will determine whether it is feasible to improve animal welfare or whether certain pressures will lead to a lowering of standards. The main factors involved primarily relate to economic considerations, specifically whether high welfare standards can be achieved and maintained in ways that are economically viable for farmers. These economic factors include trade, the post-Brexit subsidies regime,

improved information for consumers and public procurement.

Continuing political commitment will also be crucial. The current ministers at the Department for Environment, Food and Rural Affairs (Defra) strongly support improving animal welfare. However, ministers move on. Will their successors share their commitment to welfare?

Some advocate that the UK should abandon EU regulations on animal welfare and food safety in order to facilitate the conclusion of trade agreements with new partners.⁵ In contrast, the Commons Environment, Food and Rural Affairs (EFRA) Committee concludes: "The UK has an international reputation for high animal welfare, environmental and food standards. These must not be sacrificed on the altar of cheap imports."⁶

New trade deals must safeguard UK farmers from lower welfare imports

Compassion in World Farming and the National Farmers' Union (NFU) have highlighted the importance of ensuring that UK farmers are not undermined by imports produced to lower standards. The NFU emphasises the need for a commitment by Government "to fully account for differences in regulations and standards when market access is negotiated with other countries and trade blocs, ensuring UK farmers are not put at a competitive disadvantage to overseas producers subject to different standards".⁷

In order to protect farmers from lower-welfare imports, the UK must, when negotiating new trade agreements – with the EU, the US or others – insist on the inclusion of a clause permitting it to require imports to meet UK animal welfare standards. The Commons EFRA Committee states: "While we recognise the huge benefit that trade

agreements could bring, these must not be at the detriment of the UK's reputation for high animal welfare, environmental and food standards. The UK Government must not allow imports that have not been produced to the UK's high standards".⁸

Alternatively, the UK could press for the ability to place differential tariffs on imports. Imports that do not conform to UK welfare standards would be subject to tariffs that are sufficiently high to safeguard UK farmers; imports that meet UK standards would benefit from a low or zero tariff. At the very least, the UK should insist on low tariff rate quotas, whereby a relatively small quantity of a product can be imported at low tariff rates, while quantities above the quota are subject to a much higher rate. This would go some way to protecting UK farmers.

The following paragraphs consider the implications for UK standards of animal welfare of possible trade agreements with the US, Mercosur and Australia.

A UK trade agreement with the EU

UK and EU legislative requirements are in most respects identical (although there are some cases where those of the UK are more demanding). Accordingly, a trade agreement with the EU based on current UK and EU standards should not cause any new problems for UK farmers (although pig farmers will continue to face competition from pigmeat produced to lower standards, as sow stalls are completely banned⁹ in the UK whereas in the EU they may still be used in the first four weeks of the pregnancy¹⁰).

However, a trade agreement with the EU based on current UK and EU standards may impede UK attempts to introduce stronger welfare laws as farmers would probably oppose strengthened legislation – unless the agreement with the EU allowed the UK to require imports to meet UK welfare standards.

A UK trade agreement with the US

The US Secretary of Commerce Wilbur Ross has already stated the UK would have to trade according to US food standards¹¹ and has called for Britain to fall in line with US regulatory and safety standards post Brexit in order to boost trade between the two nations.¹² This raises a number of concerns:

Regulatory coherence

The Transatlantic Trade and Investment Partnership (TTIP) agreement that was being negotiated between the US and the EU placed considerable weight on regulatory consistency between the US and the EU. The US is likely to press for the inclusion of a clause in any agreement with the UK intended to align regulatory standards related to the farming, transport and slaughter of animals.

This would be worrying. US regulations on farm animal welfare are generally substantially lower than those of the UK. Indeed, the US has no federal regulations at all in many of the areas in which the UK has detailed regulations. There is no federal US legislation governing the welfare of animals while they are on the farm. There are federal provisions on slaughter (although this legislation does not cover poultry, and is much less detailed than UK legislation), and on transport (which is also much less detailed and demanding than UK legislation).

Barren battery cages are used to confine egg laying hens. They are so small that the hens cannot even stretch their wings. Often four or five hens are crammed into each cage. Whereas the UK has, under EU law, banned barren battery cages since 2012, there is no US federal ban on these cages. At the level of individual states, six states have prohibited barren battery cages and a seventh – Ohio – has enacted a moratorium against the construction of new battery cage facilities. Sow stalls are so narrow that the sow

cannot even turn round. Sows are kept in these stalls throughout their 16.5 weeks pregnancy. And for pregnancy after pregnancy. The UK has banned sow stalls since 1999. There is no US federal ban on sow stalls, although 10 states have prohibited their use.

There is a danger that enhanced compatibility of regulations would make it difficult for the UK to improve its farm animal welfare standards. There is also a possibility that the US will put pressure on the UK to dilute its existing regulations in order to make them more compatible with those of the US. Moreover, UK farmers may press the Government to lower welfare standards to place them on a level playing field with US imports.

Admission of products currently prohibited

A number of US products that cannot currently enter the UK market may be able to do so under a UK-US trade agreement. The US is likely to insist that the UK should permit the import of foods such as hormone-treated beef, chlorine-washed chicken and ractopamine-treated pork, as well as meat and dairy products produced to lower welfare standards than those of the UK. Commerce Secretary Wilbur Ross is reported as saying that the areas that could pose problems to US/UK negotiations after Brexit include compliance with EU food standards, for example on chlorine-washed chicken.¹³

Hormone-treated beef

The protracted WTO dispute between the EU and the US regarding the EU ban on imports of beef from cattle treated with certain growth-promoting hormones was finally resolved by a Memorandum of Understanding between the US and the EU. Under this, the EU is able to retain its ban on hormone-treated beef in exchange for providing substantial market access for US hormone-free beef at a zero tariff rate.¹⁴ The UK would probably need to make a similar arrangement with the US if it wants to prevent the import of hormone-treated beef.

Chlorine-washed chicken

In the US chickens are washed in chlorine to eliminate bacteria that have infected the birds during rearing and slaughter. Chlorine washes are being used to make up for inadequate hygiene in farms and abattoirs. Chlorine-washed chickens are likely to be reared to poor welfare standards, and the slaughter of chickens in the US is generally carried out to much lower welfare standards than in the UK. In the US most are stunned in the electrical waterbath, a system with serious inherent welfare problems. In the UK only 25% of chickens are stunned in the electrical waterbath;¹⁵ most are stunned with gas which, while not problem-free, is widely accepted as providing better welfare than the electrical waterbath. There are no US laws protecting chickens either on the farm or at slaughter.

Ractopamine-treated pork

Ractopamine is a beta agonist feed additive used to promote growth in pigs. Its use is permitted in the US but prohibited in the EU. There is evidence that it has a detrimental impact on pig welfare; the Humane Society of the US states that it “causes death, lameness, stiffness, trembling and shortness of breath in farm animals”.¹⁶ Possible concerns have been expressed about its impact on human health though the science on this is not definitive.¹⁷

In negotiating a trade agreement with the US, the UK should press for the agreement to allow the UK to refuse to import hormone-treated beef, chlorine-washed chicken and ractopamine-treated pork. However, the US is unlikely to agree to this as it will probably wish to use the agreement to open the UK market to these products.

Dairy products from cows treated with bovine somatotropin (BST)

BST is a genetically engineered version of dairy cows' own growth hormone. It is used in the US to increase milk yield. EU law prohibits the use of BST on animal welfare grounds.¹⁸ The prohibition

is based on a report by the EU's Scientific Committee on Animal Health and Animal Welfare, which stated that "BST administration causes substantially and very significantly poorer welfare because of increased foot disorders, mastitis, reproductive disorders and other production-related diseases."¹⁹

EU law does not prohibit the import of dairy products from BST-treated cows. A proportion of US cows are regularly injected with BST.²⁰ A trade agreement with the US could lead to an increase of UK imports of US dairy products from BST-treated cows. These cows generally have higher milk yields than UK cows and so may undercut UK farmers on price. This could drive UK dairy farmers to further intensification with concomitant risks to dairy cow welfare.

Meat from animals treated with high levels of antibiotics

Antibiotics are given to farm animals at much higher levels in the US than in the UK. In terms of mg of active ingredient of antibiotic per tonne of livestock unit:

- use in US pigs is about twice as high as in UK pigs;
- use in US chickens is about three times as high as in UK chickens;
- use in US cattle is about nine to sixteen times as high as in UK cattle.²¹

The import of meat from US animals treated with higher levels of antibiotics may exacerbate the risk of UK consumers being affected by antibiotic-resistant foodborne diseases.

A UK trade agreement with Mercosur

The Mercosur Member States (Argentina, Brazil, Paraguay and Uruguay) are major livestock producers with costs generally below those of the UK. For example pig production costs in Brazil are considerably lower than in the UK.²² Egg production costs in Argentina are lower in part

because producers are able to use barren battery cages which are prohibited in the UK/EU.²³ A trade agreement with Mercosur could make UK farmers vulnerable to being undercut by lower-welfare imports. A leaked draft of the EU/Mercosur trade agreement helpfully recognises animals as sentient beings and states that the Parties "aim to align regulatory standards related to breeding, holding, handling, transportation and slaughter of farm animals". A similar clause in a UK/Mercosur agreement could lead to a strengthening of certain Mercosur welfare standards but could also result in some UK standards being weakened to come into line with those of Mercosur.²⁴

A UK trade agreement with Australia

The Times has reported that Australia is preparing to demand that Britain accepts hormone-treated beef as part of a trade deal.²⁵

Legislation is needed requiring the UK not to conclude trade agreements that undermine UK farmers and UK standards of animal welfare

New trade agreements – whether new versions of existing agreements (to which the UK is a party as an EU member) or brand new agreements – must not undermine UK standards of animal welfare, food safety or environmental protection. They must also protect UK farmers from imports produced to standards lower than those of the UK. Accordingly, legislation is needed to ensure that the UK does not conclude any new trade agreement that compels it to allow the import of products produced to welfare standards that

are lower than those required by UK law. Without such a legal requirement it will be very difficult to strengthen UK standards of animal welfare and there may be pressure for existing legislation to be diluted to provide a level playing field for UK farmers in relation to imports.

As indicated above, an alternative approach to requiring imports to meet UK standards is to place tariffs on imports that do not conform to UK standards that are high enough to safeguard UK farmers. Section 8(5) of the Taxation (Cross-border Trade) Bill sets out factors to which the Treasury must have regard in setting the rate of import duties. These include the interests of UK consumers and the desirability of maintaining and promoting (i) productivity and (ii) external trade. The Bill should be amended to add to the factors to which the Treasury must have regard:

- the interests of producers, including farmers;
- the desirability of maintaining UK standards of animal welfare, food safety and environmental protection.

To date the Department for International Trade is opposed to any such amendments, which casts some doubt on the strength of the Government's commitment to safeguarding UK animal welfare standards.

Parliament must be involved in agreeing the terms of new trade agreements

While the UK has been in the EU, the adoption of trade agreements has been a matter for the EU. New arrangements must be made for governing how the UK is to negotiate and conclude trade agreements once it exits the EU.

The only relevant legislation appears to be the Constitutional Reform and Governance Act 2010; Part 2 deals with the ratification of treaties. Section 20 provides that treaties must be laid

before Parliament before ratification. However, it only gives Parliament the right to resolve that the treaty should or should not be ratified; it does not enable Parliament to propose modifications to the treaty. Moreover, a Minister of the Crown may overrule Parliament and ratify the treaty despite Parliament's resolution that it should not be ratified.

Without Parliament's involvement, the Government may, in its wish to conclude new trade agreements, sacrifice interests such as animal welfare. In order to minimise this danger, Parliament must have a decisive role in the formation of trade agreements. Accordingly, new legislation should provide as follows:

Before beginning to negotiate a trade agreement

Parliament should help set the mandate for the negotiations. To achieve this, legislation should provide that negotiations may not begin until Parliament has authorised their commencement. Parliament should make recommendations to the Government regarding the policy areas that should be included in the negotiations and the principles that should underpin, and any limits on, the negotiations.

During negotiations

Parliament should receive the information necessary to properly scrutinise trade agreements. Accordingly, at least once every six months the Government must lay before Parliament a report containing an account of progress made during the negotiations and an assessment of the issues likely to arise during future stages that may affect UK producers, consumers or legislative standards. Parliament should have the right to make recommendations to the Government on, and propose amendments to, any draft texts and on the UK's position during future stages of the negotiations.

At the end of negotiations

Parliament should have the right to consent to,

amend or reject a trade agreement. If it wishes to amend the agreement, the Government must place its proposals before the other party/parties to the agreement. If they do not accept Parliament's proposals, Parliament will have to decide whether to accept or reject the agreement.

Implications of the UK going into a 'hard' Brexit based on WTO rules – and trading with non-EU countries on WTO rules

Where the UK does not conclude a trade agreement, trade will be governed by the WTO rules. The common assumption is that the WTO rules do not permit trade restrictions on animal welfare grounds. However, this ignores WTO case law since 2001. This indicates that countries can require imports to meet welfare standards equivalent to their own, provided that there is no element of discrimination that favours domestic producers and no discrimination between different would-be exporting countries. In the US-Shrimp case the WTO Appellate Body concluded that in certain circumstances an importing country may make access to its market conditional on the adoption by the exporting country of a programme comparable in effectiveness to its own.²⁶

WTO Article XX sets out Exceptions to the WTO prohibition on trade restrictions. One of the Exceptions relates to public morals. In the US-Gambling case, the WTO dispute panel considered that the term "public morals" denotes standards of right and wrong conduct maintained by or on behalf of a community or nation.²⁷ In the EC-Seal Products case the Appellate Body ruled that in the EU (and therefore of course in the UK) animal welfare is a concern that comes within the field of public morals.²⁸

WTO dispute panels and the Appellate Body have stated on several occasions that WTO member countries have the right to determine the level of protection that they consider appropriate to achieve a given policy aim, for example as regards public health, conservation, prevention of deceptive practices or public morals.^{29,30,31} In the China - Publications and Audiovisual Products case, the WTO dispute panel noted "it is up to each Member to determine what level of protection is appropriate in a given situation", finding that China was entitled to adopt a high level of protection of public morals in its territory.³² As the Appellate Body has recognised that animal welfare is a facet of public morals, the UK will be able to determine the level of animal welfare that it considers to be appropriate.

The belief that countries cannot require imports to meet certain welfare standards is undermined by the fact that EU law requires imported meat to be derived from animals slaughtered to welfare standards at least equivalent to its own³³ and this has not been challenged under the WTO rules.

The significance of the above rulings has been recognised by Defra Minister George Eustice, who has said: "there are legal precedents and case law to support the use of ethical bans on certain practices and the reflection of animal welfare in trade agreements."³⁴

The consequences of the UK unilaterally removing import tariffs post Brexit

Cheap meat from industrially produced animals is in some cases of lower nutritional quality than that from animals reared free-range who consume fresh forage and have higher activity levels.³⁵ Meat from industrially produced chickens contains substantially more fat and generally a lower proportion of the beneficial omega-3 fatty acids than meat from free-range chickens. Pasture-fed beef has less fat and higher proportions of omega-3 fatty acids than grain-fed beef.

Some are pressing for the UK to unilaterally remove all import tariffs on Brexit.³⁶ They argue that this would benefit consumers by reducing prices. This ignores the fact that cheap imported food may be of low nutritional quality, which is an important consideration bearing in mind that poor diet is now the major contributor to disease in England;³⁷ more cheap food could exacerbate this situation.

Moreover, removing all import tariffs on food would have an extremely damaging impact on UK farmers and animal welfare standards. A report published in February 2018 by the think tank Policy Exchange advocates unilaterally removing tariffs but recognises that this would inevitably result in major changes to the farming and food industry, although it tries to reassure us by saying British agriculture “would be unlikely to completely disappear”.³⁸

If food produced to low standards of animal welfare could enter the UK tariff-free, UK farmers operating to higher welfare requirements would be unable to compete; this could lead to pressure for UK welfare standards to be lowered. For example, current EU import levies on whole egg powder provide protection for the UK egg sector. Research shows that if after Brexit UK import levies on whole egg powder are reduced, UK farmers will face “severe competition” from imports from non-EU countries, particularly from Ukraine, the US and India.³⁹ Costs in these countries are lower than in the UK in part due to no or less demanding legislation on animal welfare.⁴⁰

The National Pig Association (NPA) has explained that the EU’s high tariffs on agricultural goods have offered a degree of protection from undercutting by non-EU countries. In evidence to the House of Lords European Union Committee, the NPA said: “The level of protection afforded to the EU pig sector by import tariffs is significant ... With pig production costs in the USA, Canada and Brazil considerably lower than in the UK (due

to lower welfare, legislation and environment standards) the removal or reduction of tariffs for pork products from those countries will have a significant negative impact on British pork producers.”⁴¹

The UK food market is already split into two: the provision of (a) high-standards expensive food and (b) low-standards cheap food. If substantial quantities of low-welfare food enters the UK, we could see a deepening of this fissure. Animal welfare could become a factor in exacerbating food as a source of social divisions with the least well-off becoming increasingly reliant on inhumanely produced food of poor nutritional quality.

The UK and its constituent regions

Trade is a reserved matter, with policy and legislation generally being made at the UK level. Agriculture and farm animal welfare are largely devolved, with policy and legislation being made separately by England, Scotland, Wales and Northern Ireland. It is not yet clear whether all the powers relating to agriculture that will be transferred from the EU to the UK on Brexit will then be devolved by the UK to Scotland, Wales and Northern Ireland. This is proving to be an extremely contentious matter. This briefing is written on the assumption that most of these powers that relate to animal welfare will be devolved.

Concepts of – and approaches to – farm animal welfare

Progress may be complicated by divergent views on (i) what is entailed in the concept of animal welfare, (ii) whether we should be looking at inputs/resources or welfare outcomes, and

(iii) whether it matters if animals are raised intensively.

Welfare is not just about preventing negative factors

Our understanding of what constitutes good welfare is shifting from a primary focus on preventing poor welfare to recognising the need for animals to be able to have positive experiences such as a sense of well-being. The British Government's Farm Animal Welfare Committee (FAWC) stresses that all farm animals should have "a life worth living" and a growing number should have "a good life".⁴² FAWC states: "Achievement of a life worth living requires provision of an animal's needs and certain wants ... Wants are those resources that an animal may not need to survive or to avoid developing abnormal behaviour, but nevertheless improve its quality of life."

Mellor (2016) stresses that it is necessary not only to minimise negative experiences but also "to provide the animals with opportunities to have positive experiences".⁴³ Such experiences can arise "when animals are kept with congenial others in spacious, stimulus-rich and safe environments which provide opportunities for them to engage in behaviours they find rewarding. These behaviours may include environment-focused exploration and food acquisition activities as well as animal-to-animal interactive activities, all of which can generate various forms of comfort, pleasure, interest, confidence and a sense of control."

Inputs and outcomes

Some argue that we only need focus on outcomes when we consider animal welfare. This can lead to the suggestion that little attention need be given to systems and inputs, provided that welfare outcomes are good. However, certain resources – such as good housing, enrichment materials, sufficient living space and good air quality – are

necessary prerequisites for attaining acceptable outcomes. An integrated, fully rounded approach to animal welfare will take account of both outcomes and inputs.

Does it matter if animals are raised intensively?

The intensive sector points out that one can get poor welfare in a free-range/extensive system. This is true if the system is poorly designed or managed. The intensive sector favours this argument as it muddies the water and creates a perception that the farming system does not matter and that there is no need to distinguish between intensive and extensive systems.

However, the concept of "welfare potential" is crucial in this debate. A free-range or extensive indoor system has the potential, if well designed and well managed, to deliver good welfare outcomes. In contrast to this, even with good stockmanship, an intensive system has little potential to provide satisfactory outcomes. The argument that intensive systems can provide acceptable welfare is dependent on taking a very narrow view of what constitutes good welfare. It ignores the need for animals to be able to perform their natural behaviours and to have positive experiences. The world-class welfare that Defra seeks⁴⁴ cannot be found in intensive systems. In some cases, e.g. zero-grazing of dairy cows, an intensive system can produce some good outcomes, such as low incidence of lameness, but cannot deliver other core elements of welfare, in particular the ability to perform natural behaviours.

Post-Brexit farm support payments (subsidies)

Michael Gove is committed to basing post-Brexit subsidies on the principle of "public money for public goods". A public good is

something wanted by much of the public that the market cannot, or can only partially, deliver. High standards of welfare come within this understanding of a public good.

An opinion poll commissioned by Compassion in World Farming and carried out by Survation asked, in the context of post Brexit subsidies “Do you think animal welfare should be considered a public good?” 71% said yes, with just 12% saying no.

Respondents were then asked to rank five possible objectives of public funding in order of importance. Improving animal welfare and reducing the impact of climate change were rated more highly as a proper objective of public funding than reducing the use of pesticides, improving water quality and promoting biodiversity. This is not to say that animal welfare is more important than these environmental objectives; we are simply drawing attention to strong public support for using subsidies to improve welfare.

Michael Gove recognises that enhanced animal welfare is a public good that should be supported by subsidies.⁴⁵ Labour will “design post-Brexit farm subsidies to move away from intensive factory farming”.⁴⁶ This is welcome to those who wish to see farmers being supported with the costs incurred and income forgone in improving the environment and animal welfare. However, it is anathema to “hardline” economists and some MPs who would favour all subsidies being cut.

Some argue that the main eligibility criteria for receiving farm support payments should be specific welfare outcomes, preferably those that could be measured at the slaughterhouse. However, while this approach may be ideal in some cases (e.g. intact tails for pigs) it may rule out funding for key factors that merit support, such as the use of slow-growing broilers.

We believe it would be better for Defra and the

governments in Scotland, Wales and Northern Ireland to determine which improvements they wish to achieve for each farmed species and then decide how funding can best be used to encourage those improvements. In some cases the focus may be on attaining certain outcomes (e.g. low level of lameness) while in others it may be on encouraging the use of certain resources, such as pasture-based dairying. In many cases funding will depend on both achieving specified outcomes and using certain resources, which may include elements such as training.

Below we set out the species-specific standards farmers must achieve to qualify for funding. There is, however, a danger that farmers who meet those standards may have poor welfare outcomes in other aspects of their enterprises. This is unlikely as the standards have been chosen with the aim of achieving good welfare across the board. However, to ensure that public money is not funding farms with some areas of poor welfare, a condition for receiving funding should be that, in addition to attaining the standards set out below, the farmer is a member of a comprehensive assurance scheme, such as RSPCA Assured, that covers all aspects of welfare and has genuinely high standards and rigorous monitoring arrangements.

Farmers who are members of such a scheme would qualify for support if they met the following standards:

Pigs

An “iceberg” indicator is a single factor that provides a reliable overall assessment of welfare; it effectively summarises many measures of welfare. FAWC has identified the presence of intact tails on pigs (tails that have been neither bitten nor docked) at slaughter as an “iceberg” indicator.⁴⁷ Farmers who get their pigs through to slaughter without their tails being bitten or docked will be operating a very good system. The German State of Lower Saxony pays farmers €16.50 per undocked pig.⁴⁸

Laying hens

Here a mixed approach involving both resources and outcomes would be beneficial. Funding should be available for farmers who use the best of free-range systems, e.g. with low stocking density, low flock size, mobile housing and the provision of trees and bushes. In addition, in order to receive funding, farmers must attain certain outcomes, i.e. intact beaks (no trimming) while achieving low mortality and good plumage scores.

Chickens reared for meat

Here too both outcomes and inputs deserve consideration. Funding should support the use of slow-growing breeds and low stocking densities, as scientific research shows that these bring many welfare benefits.^{49,50,51} However, receipt of funding would be contingent on achieving low footpad dermatitis scores, which can be measured at slaughter.

Dairy cows

Funding should be available for farmers who keep their cows on pasture during the grass-growing season except when the weather is too wet. Research shows that, compared with zero-grazed cows, pasture-based cows have lower levels of lameness, hoof pathologies, hock lesions, mastitis and mortality.^{52, 53} However, pasture-based dairy farmers would only receive funding if they achieved low levels of lameness and mastitis. To qualify for support farmers must neither export calves nor kill them shortly after birth.

Sheep and Beef sectors

Pasture-based beef and sheep farmers should receive support provided they achieve low levels of lameness and disease. In many cases, animal welfare payments will be part of a wider scheme for funding environmental programmes and/or supporting farmers in areas of natural constraint.

Encouraging rotational crop-livestock systems

In mixed rotational farming, animals are fed on crop residues, pasture and properly treated food

waste, and their manure, rather than being a pollutant, fertilises the land. When well managed, such systems can deliver high animal welfare and environmental standards, for example by enabling ruminants to behave naturally in an unstressed environment and by storing carbon, building soil quality and nurturing biodiversity. These systems should be encouraged by farm support payments.

Impact of the WTO Agreement on Agriculture on post-Brexit farm support payments

Care must be taken to ensure that payments are compatible with the WTO Agreement on Agriculture (AoA). The AoA limits the way in which countries can subsidise their agriculture. When the AoA was first adopted members entered into commitments to reduce their subsidies. The UK fulfilled this commitment through its membership of the EU. On leaving the EU, the UK will have to negotiate with the WTO as to whether any further reductions are required. Hopefully the WTO will accept that no further reductions need to be made. Also, the Treasury may want to substantially reduce post-Brexit farm support payments as compared with CAP levels. Accordingly, the AoA reduction commitments may not be a problem in practice.

Moreover, under the AoA support payments are not subject to reduction commitments if they are *de minimis*, i.e. if they do not exceed 5% of the total value of UK production of a product during the relevant year. In practice, most potential post-Brexit payments are likely to be covered by this exemption.

Payments are also exempted under Articles 6 and 7 and Annex 2 of the AoA if they have no, or at most minimal, trade-distorting effects or effects on production and

- *they are for training, extension or advisory services or for marketing and promotion, or*
- *they are payments under environmental*

programmes. Under paragraph 12 of Annex 2 to the AoA “eligibility for such payments shall be determined as part of a clearly defined government environmental or conservation programme and be dependent on the fulfilment of specific conditions under the government programme, including conditions related to production methods or inputs.” Also “the amount of payment shall be limited to the extra costs or loss of income involved in complying with the government programme”. If devised with care, support for pasture-based farming and integrated crop-livestock systems could fall within this category.

Post-Brexit support for animal welfare should include not just payments for the extra costs or loss of income involved. They should also include an incentive to make it attractive for farmers to operate to high welfare standards. Payments that include an incentive would probably have to come within the de minimis provision, i.e. they must not exceed 5% of the total value of UK production of a product during the relevant year.

Improved information for consumers

Governments rightly state that consumers must play their part in driving welfare improvements. The impact of consumer demand can be seen in the substantial shift away from cage eggs; 50% of UK egg production is now free range.⁵⁴

Consumer demand is being impeded by lack of clear information at point of sale as to how meat and dairy products have been produced. Since 2004 EU law has required eggs and egg packs to be labelled as to farming method. This has been an important factor in the move away from cage eggs. With meat and milk, however, consumers are largely in the dark. The problem is particularly acute as regards milk. Most milk is pooled

together making it impossible to distinguish between intensive and pasture-based milk. Labelling Matters is a partnership project of Compassion in World Farming, Eurogroup for Animals, RSPCA, and Soil Association. In 2013 Labelling Matters commissioned consumer research by the independent body Qa Research. This revealed that 83% of UK consumers want meat and dairy products to be labelled so as to clearly identify the farm system used to produce the food.⁵⁵

As indicated above, EU law already requires eggs and egg packs to be labelled as to farming method.⁵⁶ After Brexit the UK should require meat, milk and dairy products, including those which have been produced intensively, to be labelled as to farming method. It should also extend the existing labelling scheme for shell eggs to egg products e.g. eggs used as ingredients in food. The Commons EFRA Committee recommends: “that the Government introduce mandatory method of production labelling”.⁵⁷

EU legislation currently governs the labelling of food.^{58, 59,60} Labelling of food is a devolved matter for Scotland,⁶¹ Northern Ireland⁶² and Wales⁶³. The introduction of mandatory labelling of meat, milk and dairy products is likely to need primary legislation.

Public procurement: taking the lead, setting the standard

Defra’s Government Buying Standards for Food and Catering and the Balanced Scorecard for public food procurement include animal welfare considerations. However, these documents only require meat, milk and eggs to have been produced to legislative minimum standards. This is unsatisfactory. Public sector bodies should use their buying power to augment the market for food produced to high nutritional, environmental and animal welfare standards.

Public bodies' commitment to quality will help change our attitude to food. The draft London Food Strategy highlights the need for public institutions to serve good food that, among other things, has “demonstrably higher standards of animal welfare” such as free-range eggs and food produced to RSPCA Assured standards.⁶⁴

Procurement to high welfare standards does not have to lead to increased costs. Some US hospitals use meat produced more sustainably and to higher animal welfare standards but reduce the quantity of meat used in their meals.^{65,66} The savings made by using less meat can cover the extra cost of buying higher quality meat. This can produce two ‘wins’: (i) support for sustainable, high-welfare farming and (ii) healthier diets for patients.

In Denmark, the Copenhagen House of Food is responsible for meals provided in the city’s public sector. 75% of those meals are now organic.⁶⁷ By carefully balancing the contents of meals, they have been able to do this without increasing costs.

Public procurement is a devolved matter. Scottish law requires the procurement strategy of public bodies to “promote the highest standards of animal welfare”.⁶⁸ All parts of the UK should now follow Scotland’s lead.

Proposals for specific animal welfare reforms

The fact that Brexit may lead to certain improvements stems from three different factors:

- In some cases membership of the EU precludes certain improvements. Most notably, a ban on live exports would not be possible while the UK is an EU Member State as it would contravene Article 35 of the Treaty on the Functioning of the EU. This has been confirmed by two judgments by the European Court of Justice.^{69,70}

- EU Directives on the on-farm welfare of animals establish minimum standards, leaving Member States free to establish higher standards for their own producers. However, they are not permitted to require imports from other EU Member States to meet these higher standards. Accordingly, the UK has generally (but not always) been reluctant to set higher standards as this risks undermining UK farmers. If the UK leaves the EU, it may be able to require imports to meet UK welfare standards (or equivalent standards) provided that this is expressly provided for in any new trade agreement with the EU or, absent such an agreement, any such requirement complies with the WTO rules.
- Brexit has led to a cultural shift in which many recognise that Brexit gives us the opportunity to think afresh about food and farming. Moreover, animal welfare is viewed as being of greater importance than hitherto. For example, in its response to the Lord’s EU Energy and Environment Sub-Committee’s inquiry into *Brexit: Farm Animal Welfare* Defra said: “leaving the EU provides us with an opportunity to develop gold standard policies on animal welfare”.⁷¹

With the exception of live exports, the reforms listed below can be introduced by secondary legislation and are devolved matters. The list is not comprehensive; it simply gives examples of some key reforms.

Ending live animal exports for slaughter or fattening

Sheep exports

Figures provided by the Animal and Plant Health Agency (APHA) show that around 40,000 sheep are exported from Britain for slaughter on the continent each year. The long journeys are

stressful for the animals and in some cases result in great suffering due, for example, to overcrowding, high summer temperatures and animals receiving injuries en route. Many of the sheep are sent to France; a 2016 report by a Committee of Enquiry of the French Assemblée Nationale confirms that there are serious welfare problems in French abattoirs.⁷²

Calf exports

The Livestock and Meat Commission for Northern Ireland states that around 20,000 calves were exported from Northern Ireland to Spain in both 2016 and 2017.^{73,74} These are mainly male dairy calves. In addition, APHA figures show that around 5,500 calves were exported from Scotland to Spain and Italy in 2017. A review of the scientific literature commissioned by Compassion in World Farming concludes: “Scientific evidence indicates that young calves are not well adapted to cope with transport. Their immune systems are not fully developed and they are not able to control their body temperature well, thus they are susceptible to both heat and cold stress”.⁷⁵

The Government should not wait until the UK leaves the EU to introduce a ban on live exports for slaughter or fattening; it should include a ban in the forthcoming Agriculture Bill with the ban coming into force on the day the UK exits the EU.

Ending the zero-grazing of dairy cows

Around 20% of UK dairy cows are zero-grazed, i.e. they are kept indoors for all or nearly all of the year. This trend needs to be halted; cows should be kept on pasture during the grass-growing season except when the weather is too wet. As indicated earlier, research shows that pasture-based cows have better health and welfare than zero-grazed cows.^{76,77} A recent study concludes: “echoing public views on what allows for a good life for cattle, these results show that cows are highly motivated for outdoor access”.⁷⁸ UK law should emulate Sweden’s in requiring cows to have access to pasture in the grass-growing season.

Replacing sow farrowing crates with free farrowing systems

Around 50% of UK sows are placed in these crates a few days before giving birth and remain there until the piglets are weaned at 3-4 weeks of age. They are so narrow that the sow cannot turn round. Farmers use these crates to prevent sows crushing their piglets but research shows that piglet mortalities in free farrowing systems (which give the sow ample space) can be as low as, or lower than, in crates.^{79,80} British farmers and scientists have played an important part in the development of free farrowing systems.^{81,82} The UK should encourage a move to these systems; farm support payments could help farmers with a proportion of the capital costs involved and for a transitional period of, say, five years with a proportion of the additional running costs. Ultimately the use of farrowing crates should be banned, with farmers being given a reasonable phase-out period.

Ending the use of enriched cages for laying hens

Barren cages for laying hens have been prohibited across the EU since 2012, but the use of enriched cages is permitted. However, these cages provide only minor welfare improvements compared with the banned barren cage.^{83,84,85} Germany has banned enriched cages from 2025 (with certain exceptions permitting their use until 2028)⁸⁶. Austria has banned enriched cages from 2020. A similar ban should be put in place in the UK.

Improving the welfare of broiler chickens

Many UK broilers are stocked at 38 kg/m². This equates to approximately 17 chickens kept per square metre, representing substantial overcrowding. At such high densities, broilers can have high levels of infectious pathogens, leg disorders, foot pad burn and mortality.^{87,88} The maximum permitted broiler stocking density should be reduced to 30 kg/m², the maximum allowed by the RSPCA Assured scheme.

Today's chickens have been selected to reach their slaughter weight nearly twice as quickly as 40 years ago. Their legs fail to keep pace with the rapidly growing body and often are unable to support it properly. As a result, many chickens suffer from painful leg disorders.^{89,90} Legislation should require a move away from fast-growing birds towards slower growing, more robust breeds.

Conclusion

Brexit offers significant opportunities to improve animal welfare. But we may fail to realise these opportunities – and may even encounter pressure to dilute existing standards – unless the Government is able to protect UK farmers from low-welfare imports. To do this the UK will need to take a determined stance in trade negotiations. This will not be easy, as some argue that the UK should prioritise securing trade deals over maintaining its animal welfare, food safety and environmental standards.

Our recommendations set out the legislation needed to maintain and improve UK welfare standards. However, legislation on its own is not sufficient. The history of the last 30 years shows us that legislation, consumers and voluntary moves by producers and food businesses must all intermesh if we are to make real progress on welfare. Hence subsidies (on the “public money for public goods” principle), clear information for consumers (mandatory labelling of meat and dairy products as to farming method) and public procurement (to well above legislative minimum standards) must all play their part in supporting enhanced welfare.

Some advocate that the UK should unilaterally remove import duties, arguing that this would give consumers access to cheap food. This ignores the fact that imported cheap food may be of poorer nutritional quality and may be more likely to contain antibiotic-resistant bacteria than UK

food. It may also have been produced to lower food safety, environmental and animal welfare standards. The proper way to address food poverty is not to import cheap, low-quality food but rather to adopt social policies that ensure that everyone has access to affordable, nutritious food that has been produced humanely.

While the benefits of imported cheap food may well prove to be illusory, its harm would be very real in undermining UK farmers and animal welfare standards. UK farmers, facing low-welfare imports, may feel bound to press for UK welfare standards to be diluted to provide them with a level playing field.

References

- 1 Prime Minister 8 February 2017. <https://hansard.parliament.uk/commons/2017-02-08/debates/827A01DC-2F9B-4A6E-81E5-13C1BE07D07B/OralAnswersToQuestions>
- 2 Michael Gove MP, Secretary of State for Environment, Food and Rural Affairs, BBC Radio 4, Farming Today. 19 June 2017
- 3 George Eustice speaking in Westminster Hall debate on 24 January 2017 <https://hansard.parliament.uk/Commons/2017-01-24/debates/7E2FCDD9-C80D-4488-92C5-1783E703AC45/LeavingTheEUAnimalWelfareStandardsInFarming>
- 4 Michael Gove MP, Secretary of State for Environment, Food and Rural Affairs, 2017. Written Ministerial Statement, 12 December 2017 <https://www.theyworkforyou.com/wms/?id=2017-12-12.HCWS340.h>
- 5 For example <https://www.documentcloud.org/documents/4380488-IFT-FTA.html> Accessed 18 February 2018
- 6 House of Commons Environment, Food and Rural Affairs Committee, February 2018. Brexit: trade in food, Conclusion 10
- 7 NFU. Vision for the future of farming: a new outlook on international trade. <https://www.nfuonline.com/assets/96747>
- 8 House of Commons Environment, Food and Rural Affairs Committee, February 2018. Brexit: trade in food, Conclusion 20
- 9 Welfare of Farmed Animals (England) Regulations, Schedule 8, paragraphs 5 & 6 and similar legislation in the other parts of the UK
- 10 Council Directive 2008/120/EC of 18 December 2008 laying down minimum standards for the protection of pigs, Articles 3.3 & 3.4. Official Journal L 47, 18.02.2009 p. 5-13
- 11 Richard Partington, 'US Eat chlorinated chicken or you goose is cooked, says trade secretary', The Guardian, 7 November 2017, p. 1
- 12 <http://uk.businessinsider.com/us-commerce-secretary-wilbur-ross-on-post-brexit-trade-with-uk-2017-11> Accessed 13 November 2017
- 13 <http://business.europeontheweb.com/2017/11/06/us-interests-must-be-protected-in-post-brexit-eu-uk-trade-deal-says-wilbur-ross/> Accessed 13 November 2017
- 14 Revised Memorandum of Understanding with the United States of America Regarding the Importation of Beef from Animals Not Treated with Certain Growth-Promoting Hormones and Increased Duties Applied by the United States to Certain Products of the European Union, 30 January 2014
- 15 Food Standards Agency, 2015. Results of the 2013 survey of animal welfare in Great Britain, Annex 2, page 4
- 16 http://www.humanesociety.org/news/press_releases/2014/11/ractopamine-drug-challenged-110514.html Accessed 18 March 2017
- 17 Scientific Opinion of the Panel on Additives and Products or Substances used in Animal Feed (FEEDAP) on a request from the European Commission on the safety evaluation of ractopamine. The EFSA Journal (2009) 1041, 1-52
- 18 Council Decision of 17 December 1999 concerning the placing on the market and administration of Bovine Somatotrophin (BST) and repealing Decision 90/218/EEC. Official Journal L331, 23.12.1999, p. 0071-0072. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31999D0879:EN:HTML>
- 19 European Commission's Scientific Committee on Animal Health and Animal Welfare report on Animal Welfare Aspects of the Use of Bovine Somatotrophin. Brussels, Belgium. 10 March 1999. Conclusions 14-16 and 18. http://www.europa.eu.int/comm/food/fs/sc/scah/out21_en.html
- 20 Humane Society of the United States. The Welfare of Cows in the Dairy Industry, page 7 <http://www.humanesociety.org/assets/pdfs/farm/hsus-the-welfare-of-cows-in-the-dairy-industry.pdf> Accessed 19 February 2018
- 21 Alliance to Save our Antibiotics, 2018. Comparison of UK and US antibiotic use by farm-animal species
- 22 House of Lords European Union Committee, 20th Report of Session 2016–17, page 18
- 23 Horne, P.L.M. van, N. Bondt, 2017. Competitiveness of the UK egg sector, base year 2016; International comparison of production costs. Wageningen, Wageningen Economic Research, page 21
- 24 <https://trade-leaks.org/mercosur-leaks/sanitary-and-phytosanitary-measures/> Accessed 15 February 2018
- 25 The Times, 2 April 2018 <https://www.thetimes.co.uk/article/australia-to-demand-britain-accepts-hormonetreated-beef-htwfgxxsb> Accessed 11 May 2018
- 26 Appellate Body Report in United States-Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS 58/AB/RW. 22 October 2001, paragraph 144.
- 27 Panel Report in United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services,

- WT/DS285/R. 10 November 2004, para. 6.461
- 28 Appellate Body Report, European Communities – Measures Prohibiting the Importation and Marketing of Seal Products, WT/DS400/AB/R and WT/DS401/AB/R, adopted 22 May 2014, paragraphs 5.167 & 5.201.
- 29 Report of the Appellate Body in European Communities – Measures Affecting Asbestos and Asbestos-Containing Products, WT/DS135/AB/R. 12 March 2001, paragraph 168.
- 30 Panel Report, United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products, WT/DS381/R, adopted 15 September 2011, as modified by Appellate Body Report WT/DS381/AB/R, paragraph 7.460
- 31 Panel Report in United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services, WT/DS285/R. 10 November 2004, para. 6.461
- 32 Panel Report, China - Publications and Audiovisual Products, WT/DS363/R, 12 August 2009, paragraph 7.819
- 33 Council Regulation (EC) No 1099/2009 on the protection of animals at the time of killing, Article 12
- 34 George Eustice speaking in Westminster Hall debate on 24 January 2017 <https://hansard.parliament.uk/Commons/2017-01-24/debates/7E2FCDD9-C80D-4488-92C5-1783E703AC45/LeavingTheEUAnimalWelfareStandardsInFarming>
- 35 Research reviewed in Nutritional benefits of higher welfare animal products, 2012. Compassion in World Farming. http://www.ciwf.org.uk/includes/documents/cm_docs/2012/n/nutritional_benefits_of_higher_welfare_animal_products_report_june2012.pdf
- 36 Policy Exchange, February 2018. Global champion: the case for unilateral free trade <https://policyexchange.org.uk/wp-content/uploads/2018/02/Unilateral-Free-Trade.pdf>
- 37 Newton et al, 2015. Changes in health in England, with analysis by English regions and areas of deprivation, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *The Lancet*: Vol 386 December 5, 2015
- 38 Policy Exchange, February 2018. Global champion: the case for unilateral free trade, pages 30 & 32 <https://policyexchange.org.uk/wp-content/uploads/2018/02/Unilateral-Free-Trade.pdf>
- 39 Horne, P.L.M. van, N. Bondt, 2017. Competitiveness of the UK egg sector, base year 2016; International comparison of production costs. Wageningen, Wageningen Economic Research, pages 6-7 & 34-35
- 40 Ibid, page 8
- 41 House of Lords European Union Committee, 20th Report of Session 2016–17, page 18
- 42 Farm Animal Welfare Council, 2009. Farm Animal Welfare in Great Britain: Past, Present and Future https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/319292/Farm_Animal_Welfare_in_Great_Britain_-_Past__Present_and_Future.pdf
- 43 Mellor D, 2016. Updating Animal Welfare Thinking: Moving beyond the “Five Freedoms” towards “A Life Worth Living”. *Animals* 2016, 6, 21; doi:10.3390/ani6030021
- 44 Defra, 2018. Health and Harmony: the future for food, farming and the environment in a Green Brexit https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/684003/future-farming-environment-consult-document.pdf
- 45 Michael Gove speaking at NFU conference. 20 February 2018
- 46 Labour’s animal welfare plan, February 2018. <https://labour.org.uk/issues/animal-welfare-plan/> Accessed 19 February 2018
- 47 Farm Animal Welfare Council, 2009. Farm animal welfare in Great Britain: past, present and future: paragraph 168
- 48 Berentsen A, 2017. Funding strategies to promote the rearing of pigs with intact tails. For a copy email peter.stevenson@ciwf.org
- 49 Bessei W., 2006. Welfare of broilers: a review. *World’s Poultry Science Journal*. Vol 62, September 2006: 455-466.
- 50 Hall A., 2001. The effect of stocking density on the welfare and behaviour of broiler chickens reared commercially. *Animal Welfare* 10, 23-40
- 51 Knowles, T. G., Kestin, S. C., Haslam, S. M., Brown, S. N., Green, L. E., Butterworth, A., Pope, S. J., Pfeiffer, D. and Nicol, C. J., 2008. Leg disorders in broiler chickens: prevalence, risk factors and prevention. *Plos one* 3 (2): e1545. doi: 10.1371/journal.pone.0001545.
- 52 Scientific Opinion of the Panel on Animal Health and Welfare on a request from European Commission on welfare of dairy cows. *The EFSA Journal* (2009) 1143, 1-38.
- 53 Arnott et al, 2016. Review: welfare of dairy cows in continuously housed and pasture-based production systems. *Animal* doi:10.1017/S1751731116001336
- 54 British Egg Industry Council, 2018 <https://www.egg-info.co.uk/egg-facts-and-figures/industry-information/data> Accessed 16 February 2018
- 55 Qa Research, 2013. Method of Production Labelling

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- of Meat and Dairy Products Research – Report
- 56 Commission Regulation (EC) No 589/2008 of 23 June 2008 laying down detailed rules for implementing Council Regulation (EC) No 1234/2007 as regards marketing standards for eggs: Article 12 and Annex I & II
- 57 House of Commons Environment, Food and Rural Affairs Committee, February 2018. Brexit: trade in food, paragraph 133
- 58 Council Regulation (EU) No 1308/2013 of the European Parliament and the Council establishing a common organisation of the markets in agricultural products
- 59 Commission Regulation (EC) No 589/2008 laying down detailed rules for implementing Council Regulation (EC) No 1234/2007 as regards marketing standards for eggs
- 60 Council Regulation (EU) No 1169/2011 of the European Parliament and the Council on the provision of food information to consumers,
- 61 Scotland Act 1998, Schedule 5, Exceptions to section C8
- 62 Northern Ireland Act 1998, Schedule 3, paragraph 38
- 63 Government of Wales Act 2006, Schedule 5, Part 1, field 8
- 64 The draft London Food Strategy https://www.london.gov.uk/sites/default/files/london_food_strategy_2018_15.pdf
- 65 <https://www.theguardian.com/sustainable-business/2014/jun/23/bay-area-hospital-food-healthy-grass-fed-organic> Accessed 27 January 2017
- 66 <http://sustainability.ucsf.edu/1.498> Accessed 27 January 2017
- 67 <http://en.kbhmadhus.dk/organic-conversion/organic-conversion-%E2%80%93-a-plan-for-the-future> Accessed 27 January 2017
- 68 Procurement Reform (Scotland) Act 2014, section 15(5)(c)(ii)
- 69 European Court of Justice, 23 May 1996, Case C-5/94. The Queen and Ministry of Agriculture, Fisheries and Food, ex parte Hedley Lomas (Ireland) Ltd
- 70 European Court of Justice, 19 March 1998, Case C-1/96. The Queen and Ministry of Agriculture, Fisheries and Food, ex parte Compassion in World Farming Limited
- 71 <https://www.parliament.uk/documents/lords-committees/eu-energy-environment-subcommittee/Brexit-farm-animal-welfare/Gov-Brexit-farm-anim.pdf>
- 72 Assemblée Nationale 2016 Rapport sur les conditions d'abattage des animaux de boucherie dans les abattoirs français
- 73 Livestock and Meat Commission for Northern Ireland, 2017. <https://www.lmcni.com/site/wp-content/uploads/2017/01/Latest-bulletin.pdf> Accessed 26 September 2017
- 74 Livestock and Meat Commission for Northern Ireland, 2018. <https://www.lmcni.com/site/wp-content/uploads/2018/01/06012018-for-website.pdf> Accessed 16 February 2016
- 75 Weeks C. 2007. UK calf transport and veal rearing. A report for Compassion in World Farming
- 76 Scientific Opinion of the Panel on Animal Health and Welfare on a request from European Commission on welfare of dairy cows. The EFSA Journal (2009) 1143, 1-38.
- 77 Arnott et al, 2016. Review: welfare of dairy cows in continuously housed and pasture-based production systems. Animal doi:10.1017/S1751731116001336
- 78 Keyserlingk et al, 2017. Dairy cows value access to pasture as highly as fresh feed. Scientific Reports | 7:44953 | DOI: 10.1038/srep44953
- 79 Weber et al, 2007. Piglet mortality on farms using farrowing systems with or without crates. Animal Welfare 16: 277-279.
- 80 Baxter EM, Lawrence AB, and Edwards SA. Alternative farrowing accommodation: welfare and economic aspects of existing farrowing and lactation systems for pigs. Animal. 2012; 6(1):96 -117.
- 81 Ibid
- 82 <http://www.36ofarrower.com/> Accessed 18 December 2016
- 83 EFSA AHAW Panel (EFSA Panel on Animal Health and Animal Welfare), 2015. Scientific Opinion on welfare aspects of the use of perches for laying hens. EFSA Journal 2015;13(6):4131, 70 pp. doi:10.2903/j.efsa.2015.4131
- 84 Rodenburg TB, Tuytens FAM, and Sonck B. 2005. Welfare, health, and hygiene of laying hens housed in furnished cages and in alternative housing systems. Journal of Applied Animal Welfare Science 8(3):211-26.
- 85 Lay D et al, 2011. Hen welfare in different housing systems 2011 Poultry Science 90 :278–294
- 86 <https://www.buzer.de/gesetz/7344/al54179-o.htm> Accessed 18 December 2016
- 87 Agra CEAS Consulting, 2006. Broiler analysis (Report for RSPCA)
- 88 Hall A., 2001. The effect of stocking density on the welfare and behaviour of broiler chickens reared commercially. Animal Welfare 10, 23-40

89 Knowles, T. G., Kestin, S. C., Haslam, S. M., Brown, S. N., Green, L. E., Butterworth, A., Pope, S. J., Pfeiffer, D. and Nicol, C. J., 2008. Leg disorders in broiler chickens: prevalence, risk factors and prevention. Plos one 3 (2): e1545. doi: 10.1371/journal.pone.0001545.

90 European Commission, 2016. Report on the impact of genetic selection on the welfare of chickens kept for meat production. COM(2016) 182 final

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