

PVSGEU response to EFSA "Welfare of broilers on farm" report 2023.

The Poultry Veterinary Study Group of the EU (PVSGEU) welcomes the opportunity to respond to the EFSA Broilers on farm report 2023.

Summary:

The EFSA report is a comprehensive review of the published science on the welfare of broilers on farm and this should be welcomed as an aid to assist producers, legislators and consumers in decisions to continuously improve welfare of broilers. However the conclusions and recommendations of the EFSA committee are limited solely to welfare outcomes and do not consider the wider implications for sustainable poultry production, food security and environment which is surely a primary aim of the EU Green Deal Strategy and Farm to Fork initiative. The proposal to reduce broiler stocking density to 11kg/m² whilst theoretically improving broiler welfare will have serious implications for greenhouse gas emissions, cost of production and food security in the EU. If these recommendations are implemented Poultry producers in the EU will not be able to compete with producers from 3rd countries and the result will be to export our poultry meat production to 3rd countries which ultimately will not improve the welfare of the birds providing the meat we eat in Europe. Furthermore the availability of poultry meat as a nutritious, low carbon and affordable source of animal protein in EU will inevitably be compromised and potentially less available to a large proportion of the EU population. As veterinary surgeons we are committed to a One Health strategy and a major component of One Health is a nutritious diet which should be available to all world citizens.

Introduction:

EFSA have produced a report on broiler welfare. The report is an excellent and comprehensive review of the published welfare science related to broilers. The report presents conclusions and recommendations to improve welfare. However the report does not consider the wider societal, environmental and animal health implications of these recommendations. This is somewhat surprising as the rationale for this review is in part driven by the EU strategy for sustainable food production, the Green Deal and Farm to Fork. Furthermore the report does not consider in detail the most important factor in improving animal welfare which applies across all livestock species, which is the quality and capability of the farmer/animal keeper management. Implementation of these recommendations will have far reaching implications for EU food production and food security. It would almost certainly result in animal protein production being exported to third countries with the

associated risk to food supply to EU citizens. Furthermore exporting animal protein production to third countries will NOT result in overall improvements in animal welfare as those countries will continue to be able to rear animals to the standards accepted in those countries.

Key recommendations in the broiler welfare report:

Growth rate should be limited to a maximum of 50 g/day to allow the broilers to maintain better health and being active.

There are numerous studies that demonstrate improved Animal Based Measures (ABM) in slower growing strains of broiler compared to standard strains. Key ABM that are improved in slow growing strains are walking gait, use of perching, exploratory behaviour and mortality rates. These improved ABM are in the main due to the different body conformation and growth rate of the standard broiler compared to the slow growing strains. Historically, breed selection focused on increased breast muscle and overall yield to improve production efficiency as this has been the demand of consumers as they prefer breast meat to leg meat and producers were looking to improve feed efficiency to supply a low cost high quality protein to the human population. However breed companies have for many years focused on breeding traits in a more holistic manner which has resulted in substantial, balanced improvements in health, disease resistance, leg strength and welfare rather than purely growth rate. PVSGEU considers that there is no rationale for stipulating a specific growth rate (here 50g/day), the selection of this growth rate is completely arbitrary. Furthermore, to set specific parameters for growth rate would be a mistake as standard breeds may be able to grow rates greater than 50g/day and still exhibit the improved ABM seen in current slow growing broilers. Thus stipulating a specific growth rate could stifle improved efficiency of production which is so important in a world with increasing human population, limited agricultural resources and climate change. EFSA throughout their report have failed to acknowledge the most important aspect to improve welfare and health which is environmental control, husbandry, management and stockmanship. In addition, the significant negative carbon footprint of slower growing, less efficient, production cannot and should not be ignored

Feed restriction in broiler breeders should be avoided by choosing the appropriate hybrids and feed and management measures.

Selection for broiler growth rate and feed conversion efficiency has resulted in great improvements in productivity, without increases in overall mortality. However the main driver to the growth rate improvement is that the modern broiler has a much greater appetite than its predecessor. Unfortunately to maintain satisfactory egg production and fertility from the broiler parent stock it is necessary to restrict their feed intake otherwise they become overweight and lose their reproductive potential. This results in the broiler breeder paradox where if its appetite is satisfied then it becomes less productive or must have its appetite controlled to maintain adequate production levels and bird health. Alternatively slower growing strains could be used, but would result in less efficient and less sustainable poultry production. Dietary dilution and appropriate feeding managment to reduce nutrient intake are therefore the only practical ways to alleviate hunger in the modern broiler strains and manage bodyweight to achieve satisfactory production parameters.

A maximum stocking density of 11 kg/m2 should be applied to allow the broilers to express natural behaviour, to rest properly and to support health.

PVSGEU disagree with this recommendation. EFSA has come to the conclusion that a stocking density of 11kg/m2 based on modelling would ensure that broilers have enough space to express a whole range of "normal" behaviours without impacting on neighbouring birds. However this is based on the premise that birds want to have space all around them at all times and a theoretical and binary assessment of what would be best to indicate a "good life" for a **totally** unrestricted animal. If this approach is applied to a ABM welfare assessment to ANY animal production system, or even the keeping of a pet animal, then neither would be able to be kept under the control of man for production or recreation.

In the opinion Foot Pad Dermatitis (FPD) is taken as an ABM for space allowance but the assumption that FPD is directly linked to space allowance via its relation to litter quality is in contrast with a large body of literature supporting the concept that chicken welfare is influenced more by housing conditions and stockmanship than by stocking density. Indeed, Directive EU 2007/43 is based on the premise that provided producers are able to provide good quality housing which can maintain an environment that complies with stringent defined parameters with regard to mortality, temperature, humidity and noxious gas levels then higher stocking density will be permitted.

Dry and friable litter should be provided from day one and new litter material should be added throughout the rearing period to support comfort and exploratory and foraging behaviour.

PVSGEU agree wih this recommendation, dry and friable litter is really important to support health and welfare of the birds, and the addition of new litter will encourage exploratory and foraging behaviour. It is a complex area combined with drinker design and management and the efficiency and management of modern ventilation systems linked to stocking rates. However, the biosecurity risks associated with the management, storage and introduction of new litter must also be a priority at all times.

Birds should not be housed in cages but in enclosures that fulfill the minimum requirements as defined in this Scientific Opinion.

PVSGEU agree that birds should not be housed in cages, however it may be necessary to house birds temporarily in cages for specific assessments e.g feed conversion assessments of primary breeding stock. If birds require to be temporarily housed in cages then the time the birds should be housed in cages should be kept to a minimum. Further advances in technology for the individual identification of birds in such assessments may obviate the need for individual bird restriction or isolation.

Covered verandas should be provided to broilers and breeders to allow birds to choose between different temperatures, light conditions and substrate quality and promote foraging, exploratory and comfort behaviours.

PVSGEU do not think it should be a requirement to provide verandas. Installation of verandas will alter the manner in which air inlets function and this can have a detrimental impact on the flow of air in the housing making litter management much more difficult. Since litter quality is critical to bird health and welfare it is imperative that the ability to manage and maintain friable litter is not compromised. Light conditions within housing can be altered by providing natural light through windows and skylights or altering light levels across this house. Both these interventions will promote exploratory and comfort behaviours without compromising ventilation control and litter quality. Retrofitting verandas is also

likely to have a more significant impact on ventilation control as exhaust fans and air inlets are already installed for maximal control in existing housing. The retrofitting of verandas will impact on the air inlet capacity and inlet position with likely detrimental impacts on litter quality. The climate across Europe is very different and therefore it will not be practical, environmentally sustainable to provide covered verandas in the Nordic countries in winter or in Southern European countries in summer as the compromise to ventilation either too cold or to hot will impact on overall bird welfare. Verandas can also represent a potential flaw in maintaining the highest levels of biosecurity in poultry farms, known to be important in controlling the introduction of pathogens such as avian influenza and salmonella.

Elevated platforms and dark brooders for broilers and perches for broiler breeders should be provided to create functional areas and environmental enrichment to the birds.

PVSGEU agree that elevated flat platforms are more likely to be used by broiler birds than true perches and their introduction will provide environmental enrichment. Installation of these platforms under drinker lines could be a useful way of helping litter management in these areas. However more research is needed to understand the benefit of installing platforms without compromising feeding and drinking space in commercial housing. Breeders in rear are likely to use perches, however this is less likely in lay and provision of elevated slatted areas in lay will probably provide a better source of enrichment for laying birds. The benefit of dark brooders is more debatable and more research is needed to understand the benefit of providing dark brooders to broilers within commercial housing stock.

Harmonised assessment methods and scoring systems should be implemented for assessing mortality on farm, wounds, carcass condemnation, and FPD in broilers at slaughter to monitor on-farm welfare of broilers in Europe.

PVSGEU agree that a harmonised assessment method and scoring system should be implemented for assessing mortality on farm, wounds, carcass condemnation, and FPD in broilers at slaughter to monitor on-farm welfare of broilers in Europe. In the opinion Dead on Arrivals(DOA) is not considered as ABM since DOA figures can be affected by transport conditions however it's not clear why wounds are considered as ABM since they can be even more related to catching and transport than DOA. Monitoring and recording of many potential ABMs is currently undertaken as recommended by the current Broiler Directive. Accurate recording of such data is complex and may be inconsistent and requires ongoing scrutiny and feedback to maintain and improve welfare rather than simply be used to identify "unacceptable" spikes in trigger values.

All forms of mutilation should be avoided in broiler breeders. Preventive measures should be in place to prevent the need of mutilations.

In principal PVSGEU agree that mutilations should be avoided, however further research should be undertaken on the effect of toe trimming in breeding cockerels and mating injuries to females. Considerable flank integument damage to females can occur as a result of mating damage if the cockerel toes remain intact. Further advances in technology for the individual identification of birds in such situations may obviate the need for individual bird mutilation. Before mutilations are banned a full impact assessment of the consequences should be undertaken.

Conclusions:

In conclusion, PVSGEU consider the EFSA report to be an excellent and comprehensive review of the published welfare science related to broilers and broiler breeders. The report presents conclusions and recommendations to improve welfare, however the report does not consider the wider societal, environmental and animal health implications of these recommendations. This is somewhat surprising as the rationale for this review is in part driven by the EU strategy for sustainable food production, the Green Deal and Farm to Fork. Furthermore the report does not consider in detail the most important factor in improving animal welfare which applies across all livestock species, which is stockmanship and the quality and capability of the farmer/animal keeper. PVSGEU fully endorse some of the recommendations in the opinion. However PVSGEU consider that some other recommendations lack the practical evidence to support their implementation and furthermore would have unintended consequences and potentially far reaching implications for EU food production and food security. More specifically the recommendations on stocking density, broiler growth rates and provision of verandas will most certainly result in a large proportion of poultry production being exported to third countries which will NOT result in overall improvements in animal welfare as those countries will continue to be able to rear animals to the standards accepted in those countries. Furthermore exporting poultry production to third countries will impact on food security for European citizens.

PVSGEU is a group of specialist veterinary surgeons serving the poultry sector in Europe. We are committed to a One Health Strategy as has been evidenced by our drive to reduce antimicrobial use in poultry production across Europe. However a major component of One Health is a nutritious, safe diet and poultry products are a major contributor to a healthy diet. We believe it is imperative that this should be available to all world citizens without negatively impacting on environmental health. Some of the recommendations in the EFSA report are directly contrary to environmental sustainability.

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