



DG Health and
Food Safety

OVERVIEW REPORT

Study Visits on Rearing Pigs with Intact Tails

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**OVERVIEW REPORT ON A SERIES OF STUDY VISITS
CARRIED OUT
BETWEEN 25 JANUARY AND 8 APRIL 2016
IN ORDER TO
SHARE GOOD PRACTICE ON REARING PIGS WITH INTACT TAILS**

Executive Summary

The objective of this report is to provide an overview of good practices for the production of pigs with entire tails and highlight the reasons why this is not more widely practised. These were identified in the course of DG Health and Food Safety study visits to countries which do not perform routine tail docking of pigs. This is also part of the Commission's initiative to achieve better implementation of Directive 2008/120/EC on the protection of pigs.

The Member States' national experts who attended the study visits were presented with facts and solutions which contradicted their beliefs that avoidance of tail docking is not possible.

There was a general consensus among them that mutilations mask problems and that rearing pigs with intact tails requires stress to be lowered in order to reduce the underlying causes of tail biting.

Good practices identified at farm level that contributed to the production of pigs with entire tails included: management of enrichment materials, feed, air quality, competition between animals and health status. In addition to the above, farmers must rapidly identify the tail biter and thereby prevent outbreaks of tail biting when they first appear.

High standards of health, a good level of environmental conditions and management in farms result in a lower use of antibiotics, which is also important in the framework of antimicrobial resistance and human health.

In order to maintain high standards of pig welfare, on-going support to farmers from advisory organisations and private veterinarians together with funding provided by various Government welfare schemes also play an important role.

Germany, Denmark, France and the Netherlands are incorporating lessons learned during the study visits into measures to reduce routine tail docking of pigs, which are already underway. Ireland has actions planned which includes the supervision of farmers' risk assessment for tail biting, while five Member States are relying more on educational campaigns. Other Member States are considering strategies to address the tail docking issue but provided no concrete proposals.

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ABBREVIATIONS AND DEFINITIONS USED IN THIS REPORT

Abbreviation	Explanation
EFSA	European Food Safety Authority
EU	European Union
the experts	Member States national experts that attended the study visits

1 INTRODUCTION

Different factors linked to intensive farming can cause abnormal behaviour in pigs. In the growing pig this can take the form of tail, ear or flank biting, but tail biting is viewed as the most widespread and serious of these problems and it is a very painful condition for the pigs. No one system of pig keeping is immune from tail-biting, but it is clearly influenced by the environment. A report from the European Food Safety Authority (EFSA, 2007)¹ suggests that 30-70% of farms have some degree of a tail biting problem, with estimates of the prevalence of lesioned tails on farms varying widely, but in the order of 1-5%. Recent data gathered by the Commission indicates that data on tail biting is available in only five European Union (EU) Member States. EFSA also indicates that the most significant causal factors are: the absence of straw, the presence of slatted floors and a barren environment.

It is important to recognise that these abnormal behaviours indicate that all is not well in the husbandry system and that it should be modified. Tail biting has a complex multifactorial origin and most researchers believe that improved environmental design is the most promising approach to achieve a reduction in biting and to reduce or eliminate the need for docking. Nevertheless, in an attempt to prevent this behaviour, on most pig farms in the EU pigs are routinely tail docked, i.e. part of the pigs' tail is removed in order to reduce the risk of tail biting in older pigs. However, tail docking is in itself a painful procedure for the pigs, and it does not remove the causes that trigger tail-biting. Therefore, tail docking should only happen when, having tried to remove the causes of tail-biting, a problem still remains, and not as a routine precaution.

2 OBJECTIVE

The objective of this report is to provide an overview on good practices for the production of pigs with entire tails and highlight the reasons why this is not more widely practiced. These were identified in the course of DG Health and Food Safety study visits to countries which do not perform routine tail docking of pigs.

This is also part of the Commission's initiative to achieve better implementation of Directive 2008/120/EC² on the protection of pigs.

3 BACKGROUND AND METHODOLOGY

Council Directive 2008/120/EC lays down standards for the protection of pigs. It requires Member States to ensure that tail docking is not carried out routinely but only where there is evidence that injuries to pigs' tails have occurred.

Commission Recommendation (EU) 2016/336³ provides measures which should be applied in accordance with the above mentioned Directive.

Staff working document on best practices with a view to the prevention of routine tail docking and the provision of enrichment materials to pigs provides a useful tools for a harmonised

¹ The risks associated with tail biting in pigs and possible means to reduce the need for tail docking considering the different housing and husbandry systems - Scientific Opinion of the Panel on Animal Health and Welfare, see: <https://www.efsa.europa.eu/en/efsajournal/pub/611> and <http://onlinelibrary.wiley.com/doi/10.2903/j.efsa.2007.611/epdf>

² Council Directive 2008/120/EC of 18 December 2008 laying down minimum standards for the protection of pigs (OJ L 47 18.2.2009)

³ Commission Recommendation (EU) 2016/336 of 8 March 2016 (OJ L 62, 9.3.2016, p. 20)

understanding on how the provision of manipulable material and the avoidance of tail docking can be practically achieved.

In 2014, the European Parliament published a study on routine tail docking of pigs⁴. It concluded that all the available evidence pointed to persisting high rates of non-compliance in the large majority of Member States.

The Commission has received numerous complaints from non-governmental organisations regarding the failure of EU Member States to prevent routine tail docking of pigs. With the exceptions of Sweden and Finland, routine tail docking is practised on the vast majority of farms in all other EU Member States. In addition to the two Member States successfully rearing pigs with intact tails, Switzerland and Norway have also managed to avoid routine tail docking of pigs. These four successful countries maintain high standards in relation to many of the parameters listed in Commission Recommendation (EU) 2016/336: enrichment materials, thermal comfort and air quality, health status, competition for food and space, and diet.

The Commission organised three study visits (to Finland, Sweden and Switzerland) in 2016. Experts from DG Health and Food Safety travelled with experts from fourteen Member States. The objective of the visits was to facilitate Member States national experts ('the experts') in assessing the situation in countries which successfully manage to rear pigs with intact tails. They were asked to identify good practices and consider how these might be incorporated into the approach of the competent authority of their Member State on this issue.

The study visits were carried out in agreement with the competent authorities of the three countries visited with the participation of experts from Austria, Belgium, Czech Republic, Germany (2), Denmark, Spain, Ireland, France, Hungary, Italy, the Netherlands, Portugal, Romania and the United Kingdom.

4 MAIN PROBLEMS AND POSSIBLE SOLUTIONS

The study visits helped to rebut the perceived understanding of the experts that rearing pigs with intact tails in intensive systems is impossible.

4.1 ECONOMICS

It was a general assumption among experts that keeping pigs with intact tails costs much more. The host countries illustrated the benefits of low stress methods of farming, such as increased food conversion rates, prevention of losses from tail biting in growing pigs, and a reduction in the duration of farrowing in sows. Marketing and an improved image of the sector were also seen:

- In Sweden, the Government and the Board of Agriculture, together with pig producers, retailers and banks developed an action plan to promote consumption of Swedish pig meat. As a result, farmers benefited from an improved economic situation with banks and slaughterhouses acting as guarantors for investment at farm level.

Funding was also important for the sector:

- EU Rural Development funds are used in Finland to provide €13 per livestock unit for enrichment materials and €19 for caring and providing accommodation for sick animals.
- The Nordic Project⁵, Farewell Dock⁶ and a project on enrichment material are all part

⁴ http://www.europarl.europa.eu/RegData/etudes/STUD/2014/509997/IPOL_STU%282014%29509997_EN.pdf

funded by the Government in Finland. This allows researchers to carry out work on farm and develop a close working relationship with the pig industry and the authorities.

- Support also comes from participation in quality assurance schemes where various criteria for managing farms reduce the risk of tail biting.

4.2 TAIL BITING

"Tail biting is worse than tail docking" was cited by many of the experts as one of the main reasons why routine tail docking takes place. The study visits demonstrated that tail biting does occur in the countries visited. However, it was the stockmanship (i.e. having the tools to keep livestock in the proper mental state as they go through the entire production process) of pig keepers which ensured that outbreaks of tail biting were quickly managed.

Farmers spend time during their daily inspections to identify biters, e.g. in Sweden, time spent providing enrichment materials is also used to watch pig behaviour. Lack of hospital pens can be a contributing factor to tail biting incidents as biters and victims cannot be dealt with properly if there are no free pens available. It is a good practice to specify a ratio for designated, separated, space for animals in need of extra care (e.g. the possibility to house at least one animal in every 25). In EU legislation there is a general requirement to care for sick or injured animals but no prescribed ratio for sick pens/number of animals.

To deal with an outbreak of tail biting the following were among actions to be taken immediately:

- remove the biter and remove and treat bitten pigs;
- add fresh enrichment material such as rope, fresh wood, branches, paper bags, straw;
- check access to water and food, ventilation, sufficient space to avoid fights, other measures to reduce aggression;
- possible other measures such as adding salt licks, mineral blocks.

The most important subsequent action was to identify and correct the causal problem.

4.3 SLURRY HANDLING AND ENRICHMENT MATERIALS

It was a commonly held belief among the experts that enrichment materials are not compatible with common slurry handling systems, especially in fully slatted housing. Solutions seen included:

- In Switzerland, farmers operate buildings with fully slatted floors but provide enrichment material in the form of rolls of compressed wheat chaff. Pigs eat what they can chew from these rolls and little material enters the slurry system. The provision of hay in racks above the heads of the pigs is another solution which has a minimal impact on slurry handling.
- In Finland and Sweden, the amounts of straw provided per day, as well as its length, together with the diameter of the slurry pipes allows the use of straw. Any periodic blockages are dealt with by using slurry agitators.

⁵ Details on this can be found at: [Nordic Project](#)

⁶ Details on this can be found at: [FarewellDock](#)

The cost of materials and labour were perceived as high in those countries where tail docking is routinely carried out and this was one of the other common reasons why enrichment materials were not more widely used. However the study visits showed that:

- in Sweden, such materials represent 0.25% of costs in fattening farms (6kg of straw per finished pig) and 2.8-4% for breeding units (650-1000kg of straw per sow per year);
- in Switzerland, the expenditure on rolls of compressed wheat chaff was around 90 cent (€) per fattening pig;
- time spent on the distribution of enrichment material facilitates inspection and early intervention when a tail-biting, or other problem, occurs.

4.4 OTHER RISK FACTORS AND POSSIBLE SOLUTIONS

Commission Recommendation (EU) 2016/336 lists certain other risk factors which must be managed at farm level including:

Thermal comfort and air quality were of extreme importance for pig producers in the three countries visited in the maintenance of low levels of animal stress. The general design imperatives are to limit the flow of cold air over pigs' open sleeping areas and prevent air from being extracted or rising from slurry channels. Animals must be comfortable at both hot and cold times of the year, and should not be overheated in winter: heat exchangers can be used to create a stable climate.

Cleanliness is linked to the level of noxious gases which act as a stressor. Dirty pigs may increase the level of such gases but heated floors, using heat exchangers from the slurry system, result in drier conditions and cleaner pigs. Biological cleaning of the air also results in cleaner pigs. Managing the provision of straw, so that it is not excessive also prevents pens from becoming very dirty. Feeders which pivot out from the wall or pen dividers which can be raised when not in use, provide a good solution to the fouling of feeders. Well-defined activity areas for lying, feeding and dunging in pens with partially slatted floors keep pigs clean and quiet; the lying area should provide a good climate and safety for those avoiding aggressors.

High Health status is identified in the three host countries as one of the best preventative measures in the avoidance of tail biting. To ensure this, hygienic barriers are needed in all buildings and mixing should be avoided (a genuine all in all out system). Not derogating from the weaning of piglets before 28 days of age produces stronger pigs that are less likely to need treatment, incur additional labour costs, or require specialised feed. It is considered that this achieves more significant benefits than in comparison with the one or two more piglets per sow, per year, gained from earlier weaning. Support services are fundamental to the achievement and the maintenance of a good health status. Private veterinarians visit pig farms more than once a month as part of pig health or medical treatment scheme in Finland and in Sweden. The monitoring of farms by slaughterhouse operators also provides feedback on a range of health and welfare conditions. One specific control was to put producers in a "watch-list" when they have too many animals (e.g. more than 10%) with severe tail damage, in which case the farmer is required to take remedial action to address the problem.

Competition between animals is reduced by keeping pigs of comparable size together and good sorting by size at the time of weaning when pigs from different litters are mixed. In Finland, competition at feeders is reduced by providing long troughs with wet feeding systems. No minimum space is prescribed in EU legislation for feeding space, but in Sweden the minimum length of trough space per pig is set according to the formula $(0,164 + (\text{weight (kg)} / 538))$.

Diet and the frequency of feeding are critical (multiple feeds per day (from 4-6 times). They

were seen as beneficial to sating animals' hunger, especially at the difficult transition periods in production. In addition to the availability of well formulated feed, an adequate supply of fresh water is important e.g. number of nipple drinkers per pen (1/10 animals).

5 SUBSEQUENT ACTIONS BY MEMBER STATES

Following the study visits, the Chief Veterinary Officers of the national experts were asked what actions they were considering to reduce routine tail docking of pigs. Germany and France indicated that they would introduce certain lessons learned from the study visits into actions which were already underway in their countries:

- In Germany, the approach of including input from all actors along the production chain, as seen in Finland, was being followed in a pilot project on 60 farms in one Land. A second Land was looking at incorporating the good practices seen, into the activities of their 'Animal Welfare Plan' which has involved training of consultants and farmers, notably those with pig farms where premiums are paid for rearing pigs with intact tails.
- In France, the government action plan for animal welfare 2016-2020 prioritises the prevention of cannibalism and the improvement of living conditions for pigs. A working group has been tasked with the implementation of Recommendation (EU) 2016/336 and is looking at ways to disseminate fact sheets on the prevention of tail-biting. Research projects on the design of tomorrow's pig farm buildings will also look at how to manage the risk factors for tail biting outbreaks. It also provides a network of pilot farms that are keeping pigs with intact tails.

Two other countries also had actions underway before the study visits:

- The Netherlands has a road map (Declaration of Dalfsen) which includes: a demonstration farm, development of a toolbox and a safety net to support farmers who stop tail docking. It also promotes exchange of knowledge, experiences and possible marketing advantages among a network of farmers.
- In Denmark the reduction in the number of tail docked pigs is one of the nine objectives of a National Action Plan for better welfare of pigs. Actions include, national guidelines on manipulable materials, tools to predict outbreaks of tail-biting, pen designs to reduce the risk of tail-biting, government funding to introduce an animal welfare label and participation in working groups with Dutch and German stakeholders.

In addition to these four countries which have existing strategies to reduce tail docking, Ireland also has a planned strategy, with a further five countries relying on educational campaigns. The other competent authorities were considering strategies to address the tail docking issue and/or implement Recommendation (EU) 2016/336 but provided no concrete proposals. Most experts were also interested in the indirect benefits achieved from low stress systems of production which have a strong correlation to the reduced use of antimicrobials.

6 OVERALL CONCLUSION

The Member States' national experts who attended the study visits were confronted with facts and solutions which contradicted their beliefs that avoidance of tail docking is not possible.

There was a general consensus among them that mutilations mask problems and that rearing pigs with intact tails requires stress to be lowered to in order to reduce the underlying causes of tail biting.

Good practices identified at farm level that contributed to the production of pigs with entire tails included: management of enrichment materials, feed, air quality, competition between animals and

health status. In addition to the above, farmers must rapidly identify the tail biter and thereby prevent outbreaks of tail biting when they first appear.

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ANNEX 1 – LEGAL REFERENCES

Legal Reference	Official Journal	Title
Dir. 2008/120/EC	OJ L 47, 18.2.2009, p. 5-13	Council Directive 2008/120/EC of 18 December 2008 laying down minimum standards for the protection of pigs

**ANNEX 2 – DETAILS OF INDIVIDUAL DG HEALTH AND FOOD SAFETY STUDY VISITS
CONSIDERED FOR THIS OVERVIEW REPORT**

Country	Dates of Study visit	SANTE ref. no.
Finland	25 to 29 January 2016	2016-8770
Sweden	23 to 15 February 2016	2016-8772
Switzerland	4 to 8 April 2016	2016-8774

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