

Summary: Tail Docking and Tail Biting

The Problem



Tail biting is a problem that can occur at any stage in modern pig production. It is a serious welfare issue because it causes physical damage and leads to swelling, infection in the spine and ultimately lung abscesses or septicaemia. Despite not being routinely permitted by legislation, more than 90% of pigs in the EU are tail docked, in an attempt to prevent tail biting. The procedure is carried out with either side-cutting pliers or gas-heated cautery

clippers. Tail docking causes acute pain, stress, can lead to chronic discomfort, and does not eliminate tail biting. The main cause of tail biting is the pigs' natural motivation for exploratory rooting behaviour, which if prevented is redirected to pen fixtures and other pigs.

Incidence of tail biting

Average incidence rates of tail biting are 1.3-9.2% (scoring based on lesions, not tail manipulation). Long tailed pigs were found to be 2.73 times more likely to be bitten than tail docked pigs. Typically experience of tail biting is worse in indoor systems, but it can also occur at a high rate in outdoor systems if risk factors are not addressed. Tail biting incurs huge costs to the industry, estimated at £3.5 million to the UK in 1999 and more than €8 million to the Netherlands in 2011.



Risk factors



The risk factors for tail biting include removing straw from pigs with previous experience of it, using slatted flooring, a group history of tail biting, disease, dietary imbalances (especially salt and amino acids), poor temperature, draughts, a high level of atmospheric ammonia, a lack of space and high levels of pre-weaning mortality. HAT is a useful husbandry advisory tool for assessment, which includes farm risks for tail biting (<http://www.vetschool.bris.ac.uk/webhat/>).

The Solution

'No tail docking – no tail biting' can vastly improve pig welfare, which requires proper housing design and the following risk factors to be addressed.

Provision of a complex environment



Pigs need provision of environmental resources to reduce boredom and tail biting. Resources should be complex, changeable, hygienic, relatively destructible, safe, manipulable (to encourage chewing, rooting and exploration), edible (non-toxic, with a gut fill or nutrition value), and practical. A daily supply of deep straw bedding is ideal. Other examples include mushroom compost, fodderbeets, peat, branches, and straw or beet roots and food-balls (though not sufficient alone). Resources which are commonly provided but are meaningless to pigs include metal chains and toys. Furthermore, resources must occupy

pigs for at least 20% of their time to reduce tail biting. Natural ventilation or automatically controlled natural ventilation (atmosphere and environment), is best for air quality to reduce the risk of tail biting.

Provision of adequate space

Insufficient space is a high risk factor for tail biting. Space must be provided to maximise use of environmental resources and to allow restful lying and the development of functional areas in the pen. More space should be provided, particularly in indoor systems (~ 1m² for a 100kg pig), according to the allometric equation. This calculates the space required for pigs to lie down laterally and is part of the risk analysis for tail biting. EU legislation and farm assurance schemes (including Red Tractor and RSPCA indoor Freedom Foods) do not allow for the space pigs need for general activity or to lie down laterally.



Providing 1.5m²/100kg pig allows space for active behaviour. In addition, feeding meal or liquid feeding with multiple-space feeders is better than open feeders. Mixed-sex grouping can also help to reduce tail biting.

Predicting and reacting to tail biting



Producers generally do not notice tail biting until incidence is high. Behaviours in young pigs which are associated with later tail biting include restlessness and damaging interest to tails. The frequently recommended advice of 'remove the biter' and 'provide straw twice a day' do not eliminate tail biting. Stockholm tar and Dippel's oil are potentially useful therapies.