



Swine Oral Stereotypies

Repetitive behaviours that serve no function and occupy a large portion of the pigs' time.

These behaviours not only **reduce the victim's welfare** but performance of the behaviour itself is also an **indicator of reduced welfare** (2).

> Tail-biting

> Bar-biting

> Ear biting

> Flank-biting

> Vacuum chewing

Oral stereotypies tend to occur together.

Tail-biting is the most high-risk behaviour as it negatively impacts swine welfare and economic aspects of production (3).

However, what influences tail-biting behaviour, may influence all of these behaviours (1).

Incidence of behaviour is typically studied through observational studies.



Ways to mitigate the behaviour

Why do they happen?(3)

Restrictive housing environment/ Lack of environmental enrichment.

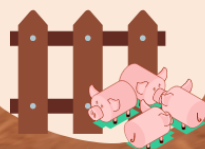


Environment places restrictions on pigs' natural behaviours, such as rooting. Therefore, pigs will redirect and channel their behaviour towards other pigs or substrates leading to oral stereotypies(3).

Heritability of tail-biting in certain breeds



High-stocking density



Unfavourable microclimate conditions

Temperature and Ventilation



Feed Restriction



Environmental enrichment materials (3)

- Straw - especially when used as bedding
- Green fodder
- Sisal rope
- Metal chains
- Fresh birch wood

When should these materials be provided? (3)

All stages from young neonatal pigs to fattening pigs. Materials should also be replenished as often as possible

Monitoring behaviours

It is important to be able to reliably identify and remove high-risk individuals to limit injuries and spread of disease.

How?

- Identifying pigs performing tail-in-mouth behaviour (may be a behavioural precursor to tail-biting) (3).
- Precision Livestock Farming (PLF) technology (2).
- Tail-biting outbreak indicators: high activity levels, high levels of individuals with tails tucked under (5).

Decrease stocking density (3)

1. Brunberg, E., Wallenbeck, A., & Keeling, L. J. (2011). Tail biting in fattening pigs: Associations between frequency of tail biting and other abnormal behaviours. *Applied Animal Behaviour Science*, 133(1-2), 18-25. <https://doi.org/10.1016/j.applanim.2011.04.019>

2. Diana, A., Carpentier, L., Piette, D., Boyle, L. A., Berckmans, D., & Norton, T. (2019). An ethogram of biter and bitten pigs during an ear biting event: First step in the development of a Precision Livestock Farming tool. *Applied Animal Behaviour Science*, 215, 28-36. <https://doi.org/10.1016/j.applanim.2019.03.011>

3. Godijn, D., Nowicki, J., & Herbut, P. (2019). Effects of environmental enrichment on pig welfare—A review. *Animals*, 9(6), 383. <https://doi.org/10.3390/ani9060383>

4. Taylor, N. R., Main, D. C. J., Mendl, M., & Edwards, S. A. (2010). Tail-biting: A new perspective. *The Veterinary Journal*, 186(2), 137-147. <https://doi.org/10.1016/j.tvjl.2009.08.023>

5. Statham, P., Green, L., Richard, M., & Mendl, M. (2009). Predicting tail-biting from behaviour of pigs prior to outbreaks. *Applied Animal Behaviour Science*, 121(3-4), 157-164. <https://doi.org/10.1016/j.applanim.2009.09.011>

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