

Question to EURCAW-Pigs: Classification of rubber toys as enrichment for pigs

30 October 2021

Question

Received: 7 September 2021

EURCAW-Pigs received the following question from a veterinary inspector in one of the Member States:

- *What is the suitability of natural rubber toys as enrichment material for pigs? The question specifically aims at the Easyfix rubber floor devices of which the rubber is confirmed as natural rubber.*

The answer will be useful in that the risk assessments carried out require the number and category/suitability of enrichments to be listed, so it would be important to have a consistent approach to that classification.

Answers

Several EURCAW experts contributed to the response below. The EURCAW secretariat did the final editing, and may be contacted for queries: info.pigs@eurcaw.eu.

In short the answer is:

- Easyfix rubber toys contain “natural rubber”, a material which is recommended by the European Commission to be used in combination with other materials.
- Research has shown that in the weaner stage, the Easyfix rubber toy may be beneficial in terms of interaction and manipulation, but this did not reduce the risk of tail biting.
- Use of the Easyfix rubber floor toy by finishing pigs is relatively low and this questions its biological relevance and its ability to meet the pigs’ need to explore.

Background

The query is related to the European Commission staff working document on “best practices with a view to the prevention of routine tail-docking and the provision of enrichment materials to pigs”. It mentions “natural soft rubber” in the text where it classifies it as suboptimal, whilst at the same time listing “rubber” as marginal in the Table. The working document recommends that only “optimal materials” should be used alone (because they meet all aspects of the pigs need for exploratory behaviour), while it recommends that “suboptimal materials” be used in combination with other materials (e.g. such that all aspects of the pigs need to explore are met by the combination). For marginal materials, no aspects are listed, and they should always be supplemented with either an optimal material or suboptimal materials.

The Easyfix rubber floor toy has soft, chewable arms, and it is loose on the floor area, which makes it very easily accessed. Chou et al. (2020a and 2020b) reported on the use by pigs of the rubber floor device (Easyfix Luna 1171, Easyfix, Ballinasloe, Ireland), and compared it to use of wooden posts. They found that finisher pigs provided with spruce post and pigs provided with the rubber device spent more time using the enrichment than pigs with larch or beech posts. This would suggest that spruce posts (softer wood) and rubber devices are preferable to larch and

beech posts. However, when authors compared the time interacting with the enrichment to a previous study using similar methodologies, but in which growing pigs were given various amounts of straw (Jensen et al., 2015), time spent using the spruce post and rubber device were lower than time spent manipulating the lowest amount of straw (10g/pig/day). This suggests that neither the spruce post nor the rubber device provide suitable outlets for the exploratory behaviour of pigs. Furthermore, neither the spruce post nor the rubber device reduced the incidence of tail lesions (spruce post actually increased it), supporting the suggestion that the low increase in time spent using the spruce post and the rubber device did not satisfy the pigs' need to explore. Chou et al (2020b) found that in the weaner stage, pigs receiving the rubber device interacted more with the enrichment compared with pigs with a spruce wooden post. Also, the floor toy was slightly more effective in alleviating the severity of tail lesions, although neither item succeeded in reducing the risk of tail biting.

The low use of the rubber devices raise questions on their biological relevance and ability to meet the pigs' need to explore.

Relevant references

Chou, J. -Y., D'Eath, R. B., Sandercock, D. A., O'Driscoll, K. (2020a). Enrichment use in finishing pigs and its relationship with damaging behaviours: Comparing three wood species and a rubber floor toy. *Applied Animal Behaviour Science* 224.

<https://doi.org/10.1016/j.applanim.2020.104944>

Chou, J. -Y., O'Driscoll, K., Sandercock, D. A., D'Eath, R. B. (2020b). Can increased dietary fibre level and a single enrichment device reduce the risk of tail biting in undocked growing-finishing pigs in fully slatted systems?

PLOS ONE 15(10): e0241619. <https://doi.org/10.1371/journal.pone.0241619>

EC (2016). *Commission staff working document on best practices with a view to the prevention of routine tail-docking and the provision of enrichment materials to pigs.*

<https://edepot.wur.nl/475711>

Jensen, M. B., Herskin, M. S., Forkman, B., Pedersen, L. J. (2015). Effect of increasing amounts of straw on pigs' explorative behaviour. *Applied Animal Behaviour Science*, 171, 58-63.

<https://doi.org/10.1016/j.applanim.2015.08.035>