

Improved methods for stunning of pigs with foam; effects of repetition and scent on pig reaction to foam.

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A method researched for stunning of pigs is nitrogen filled high expansion foam. In previous studies questions have arisen as to how aversive the pigs find the foam, and whether or not it is possible to reduce this aversiveness by, for example, adding a scent to the foam or by exposing the pigs to foam on repeated occasions. The aims of this study were to investigate if the pigs' behaviour were altered when scent was added to the foam, and if repeated exposure to non-scented air-filled foam would affect the pigs' behavioural reactions.

The study included 50 pigs (14-16 weeks of age), 30 in one group with vanilla scented air-filled foam, and 20 in the group that were exposed to a non-scented air-filled foam on three consecutive days. The first day of exposure to foam in the group of 20 pigs was also used as a control for the study with added scent.

When pigs were exposed to scented foam, the proportion of pigs exploring the foam was larger than in the group exposed to unscented foam. They also showed an increased activity. When the pigs were exposed to foam on three consecutive days there was an increased proportion of pigs from day one to three displaying vocalising behaviour, both in forms of grunts and screams/squeals. There was also a slight increase in the proportion of pigs showing escape attempts. Furthermore, increased exploration of the walls and decreased exploration of the floor was seen with time. The results indicate that it is possible to increase the pigs' interest in the foam by adding a scent to it, and there are no indications that a foam with added scent increases stress or anxiety. However, further research is needed to confirm that an increased interest in the foam is in fact correlated with lowering of stress or anxiety in the pig. The results also indicate that even though the pigs do not seem to get completely used to the foam when exposed to it on repeated days, their aversive behaviours do not increase either.