Modified ice block as an alternative type of occupational enrichment for adult Göttingen Minipigs

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Introduction

An appropriate enrichment technique is included in the Directive 2010/63/EU as a requirement when housing animals used for scientific purposes.

At Ellegaard, we implement a variety of actions and provide different toys as enrichment for our Minipigs. This is done to reduce the possibility of stress-induced behaviour but most of all to give the Minipigs an opportunity to express different elements of their behavioural repetoire, such as foraging and exploratory behaviour.

From previous experience we know that as minipigs grow older, they tend to lose interest in most toys that used to interest them when they were younger. Therefore, enrichment needs to be adapted to the age of the Minipig in order for it to reach its full potential.



Materials and Methods



Exploratory behaviour in pigs is best stimulated by materials that are deformable, destructible, manipulable, and contain sparsely distributed edible parts¹.

The ice block was designed accordingly to this:

- Irradiated straw sticking out of the ice block can be chewed on
- . the ice itself is destructible/deformable
- . the food inside is edible.

A metal chain was put inside the bucket of water before freezing. By doing so, we could attach the ice block to the sides of the pens, preventing the ice block from being pushed into the manure section.



Results, Discussion and Conclusion

The ice block attracted attention from all of the adult Minipigs in the tested pens. The lasting effect of the ice block naturally depends on the number and size of Minipigs in the different pens. In pens housing 10 Minipigs of an age around 9-10 months, the ice block lasted for 1.5-2 hours under constant interest from most of the Minipigs. When Minipigs play with the ice block, the attached metal chain rattles. This sound and movement attract the Minipigs to the chain and gives a chance for Minipigs of lower hierarchical status to play as well.

Smaller Minipigs around the age of 2-4 months showed either no interest in the ice block or were hesitant to play with it, possibly due to its size. For younger Minipigs, smaller modified ice cubes should be used in order for them to have an effect as enrichment.

The ice block proved to be a good occupational enrichment for the adult Minipigs. This combined with the fact that the ice block is cheap to produce and easy to adapt, makes it a suitable alternative to other types of occupational enrichment for adult Göttingen Minipigs.

References

- ¹ Studnitz, M., Jensen, M. B., Pedersen, L. J.
- Why do pigs root and in what will they root? *App. Anim. Behav. Sci.* 2007;3-4:183-197.



