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**Training pigs to excrete in a toilet area by manual rewarding; preliminary study.**

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**Abstract:**

**Background/Objective:** Reducing fouled floor area in the pig pen can reduce ammonia emission and improve pen hygiene. The aim of this study is to train pigs to use a certain corner of the pen indicated by a light as the toilet (a small, designated area for excretion) by rewarding them manually and to determine whether the toilet location could be moved to another location.

**Methods:** Fattening pigs in 2 pens (4 pigs/pen) were rewarded with apple pieces via a steel pipe when they excreted in the toilet. In phase 1, there were six 15-min training sessions per day with 1 hour interval, 5 training days/week, for a period of 16 days. In phase 2, the toilet location was switched to the lying area of the pigs for 2 weeks. In phase 3, the toilet location alternated between two areas (the corner trained in phase 1, and the corner near the feed trough) for 13 days. Excretion location and rewarding events were recorded during training.

**Results:** A total of 1196 defaecations and 1175 urinations were recorded. In phase 1, 70.1% and 96.8% of excretions was in the toilet area for pen 1 and 2, respectively. For pen 1, excretion in the toilet significantly decreased as the toilet area got more crowded over training days. In phase 2, almost no excretion (5.1%) occurred in the toilet. In phase 3, pigs kept using the location previously trained in phase 1 for elimination, while there was no significant increase in excretion in the designated toilet area near the feed trough.

**Conclusion:** Pigs would use a small, designated area for excretion and get a reward, however, increased activity may reduce the number of excretions in the designated area. The toilet area should be placed in a preferred place for pigs, away from other functional areas.

**Keywords:** pig toilet, excretion, operant conditioning, pig behaviour