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The effects of four types of enrichment on feather-pecking behaviour in laying hens housed in barren environments

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Abstract

Severe feather pecking, a potentially stereotypic behaviour in chickens (*Gallus gallus*), can be reduced by providing enrichment. However, there is little comparative information available on the effectiveness of different types of enrichment. Providing forages to birds is likely to decrease feather-pecking behaviour the most, as it is generally thought that feather pecking stems from re-directed foraging motivation. Yet, other types of enrichment, such as dustbaths and novel objects, have also been shown to reduce feather pecking. In order to develop a practical and effective enrichment, these different possibilities must be examined. Using a Latin Square Design, 14-week old birds were given each of four treatments: i) forages; ii) novel objects; iii) dustbaths; or iv) no enrichment. The amount of feather-pecking behaviour and the number of pecks to the enrichments were recorded. Results showed feather pecking to be highest when no enrichment was present and lowest when the forages were present, with the other two enrichments intermediate. This was despite the fact that the numbers of pecks birds gave to the forages and dustbaths were not significantly different, suggesting that they were similarly used. Thus, we suggest here that forage enrichments are most effective at alleviating feather pecking at least in the short term and attempts should be made to develop poultry housing that allows for natural foraging behaviour. Following this, providing any kind of enrichment will increase bird welfare and is therefore still beneficial.

Keywords: animal welfare, chicken, enrichment, feather pecking, motivation, stereotypic behaviour