

Conclusions

Stress in relation to a choice test may affect choiced made in upcoming choice tests

Decreasing heart rate when choosing between balanced options could indicate anticipation of difficulty



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Effects of Stress and Balance of Options on Decision-Making in Laying Hens



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Background

Every day, animals make decisions about, for example, when and where to feed, sleep or court.

Animal decision-making is used in research about their welfare, looking at behavioural and environmental preferences and needs. It is therefore important to know how different factors, such as stress, can affect animal decision-making.

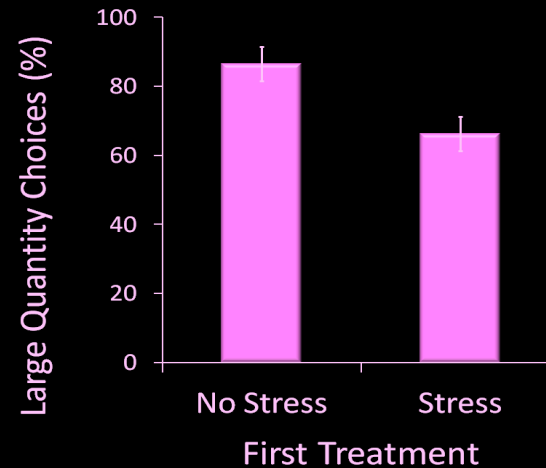


The aim of this project was to investigate how prior stress treatment affects decision-making in laying hens.

Physiological responses were also investigated.

Results

Hens stressed at their first test session showed less preference for the large food reward over all four sessions.



Heart rate decreased more rapidly within a session when hens made a choice between balanced options.



Methods

Hens were tested in a T-maze (below), while making a choice between a small and a large quantity of food reward, with or without prior stress treatment.



The values of the options were either unbalanced (large vs. small) or balanced (large vs. small but the hens needed to push through a weighted door to reach the large reward).

Heart rate was measured using a heart rate monitor that the hens carried in a harness.

