

Feeding motivation tests should stimulate meaningful behavioural responses linked to the animals' potential feeling of hunger and alleviation hereof.

Behaviour- and cognition-based methods to assess feeding motivation in dairy cows around dry-off

Introduction

- Hunger can be defined as a negative emotional state caused by undernourishment.
- Reducing feeding level is often practiced in commercial dairy farms as part of dry-off management aiming to reduce milk synthesis prior to the last day of milking.

Test illustrations



Test concepts

- Operant push-gate test (#1): trade-off between a desired resource and the performance of an operant response to gain access to the resource in question.
- Visual lateralisation and attention bias test (#2): lateralised visualisation of feed source and engagement with feeding.
- Feed-thwarting tests (#3 & #4): frequency of appetitive feeding behaviours directed toward an inaccessible feed source during a predetermined period.

Why using them?

- Relatively quick.
- Motivational and emotional states accounted.
- Little or no training required (except Test 1).
- Potential control for overfeeding (except Test 1).

Potential drawbacks

- Operant test training: long test duration may lead to overfeeding and training failure.
- Inter-individual variability in lateralisation potentially requiring large sample size.
- Successive testing may lead to habituation and reduced behaviour responses.



• **Guilherme Amorim Franchi,**
Mette S. Herskin,
Margit Bak Jensen

References

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