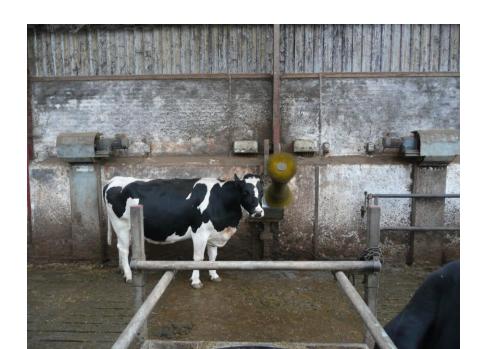
# Valid and practical measures of positive emotions in cattle

Björn Forkman, UCPH, Denmark Lise Pinaqui, SLU, Sweden Linda Keeling, SLU, Sweden

### Is absence of bad the same as good?

- Moving from bad welfare to good welfare
- FAWC: "A life worth living"
- Welfare Quality has 12 criteria, one is Positive emotional state.



#### Review of positive indicators

- •20 suggested indicators:
  - 12 behavioural
  - 3 physiological
  - 2 cognitive



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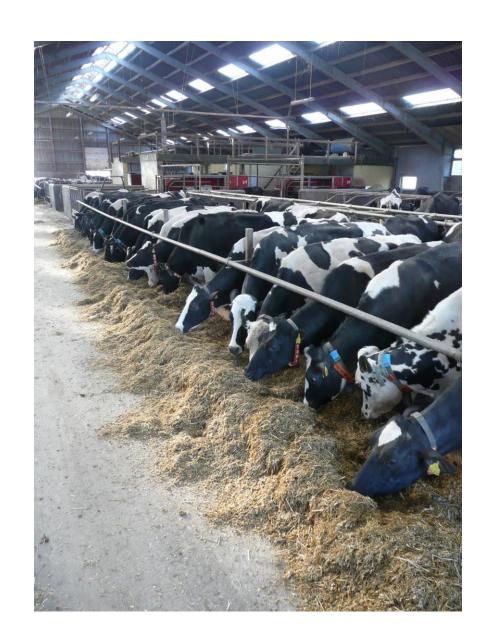
# Towards a Positive Welfare Protocol for Cattle: A Critical Review of Indicators and Suggestion of How We Might Proceed

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### 7 selected for on farm study

- Synchronization
- Exploration
- Allogrooming
- Grooming on three legs
- Brushing
- (Playing)
- (Body postures)



## 30 dairy farms visited

- Selected from 3 different levels of welfare based on database data
- Welfare quality
- Positive indicators



### Thank you for your attention. Questions?



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