Effects of an odor or taste stimulus applied to an artificial teat on the suckling behavior of newborn dairy calves

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Aim & Methods

- Lack of maternal sensory cues in the calf pen → difficulty to feed from an artificial system.

_Do newborn calves prefer a plain artificial teat or a teat modified with an odor or taste stimulus?

- Two-minute preference tests:
  - **Odor test**: plain teat vs. teat with "Freshly Cut Grass" odor
  - **Taste test**: plain teat vs. glucose-coated teat
- 10 consecutive testing days per calf (n = 51)

Results

**Teat preference - Odor test**

- No significant preference for a teat

**Teat preference - Taste test**

- Significant preference for the taste teat

**Total suckling time - Odor test vs. Taste test**

- Significantly increased total suckling time in the taste test

Conclusions

The taste of glucose, but not the “Freshly Cut Grass” odor, had a significant effect on the calves’ teat preference and significantly increased total suckling time with a dry artificial teat.

Application of glucose on an artificial teat may increase suckling motivation in ill calves or non-efficient drinkers.