Using an automated milk feeder during the suckling period will reduce stress behaviour at separation

Final DairyCare Conference, Thessaloniki March 19-20, 2018

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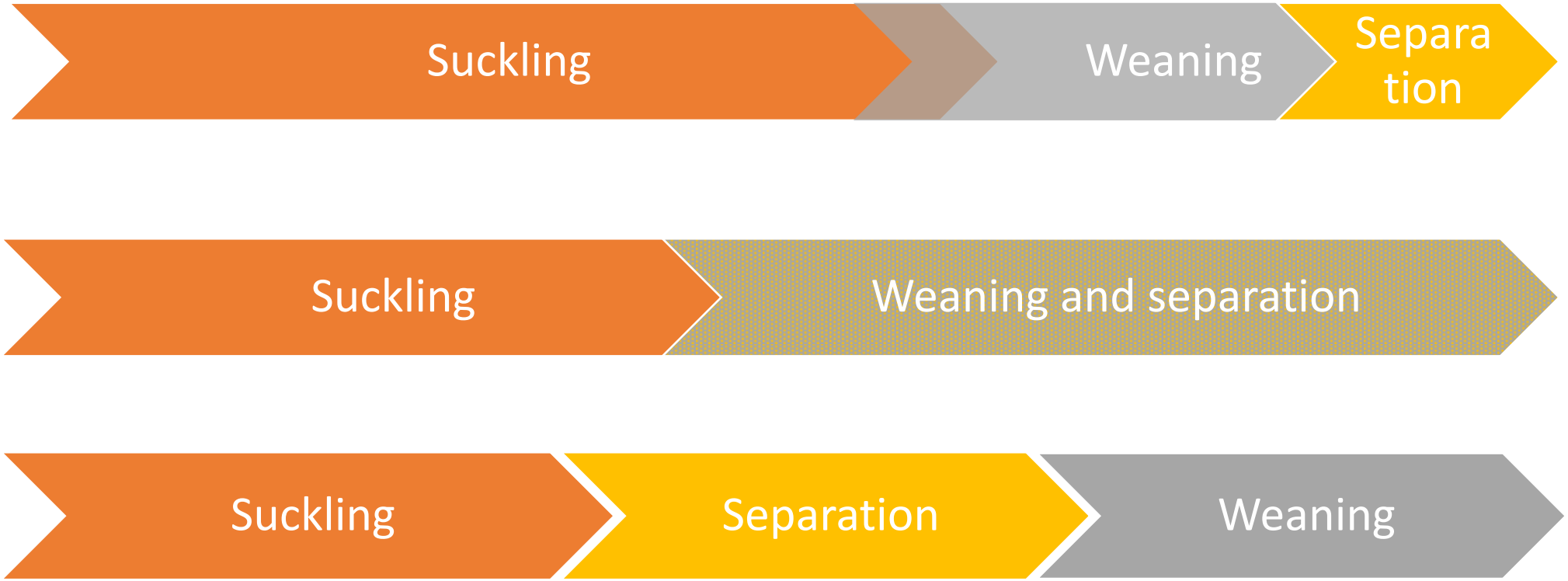
Suckling in dairy production - background



Aim

- Make the separation after a suckling period less stressful to the calf
- Evaluate how the nutritional dependence on the dam affects the dairy calf's behavioural response to separation

Foto: Louise Buxant

Material and methods

Nursing phase 6 weeks

Total separation 3 d

Partial separation 4 d

Housed in adjacent pens during the day

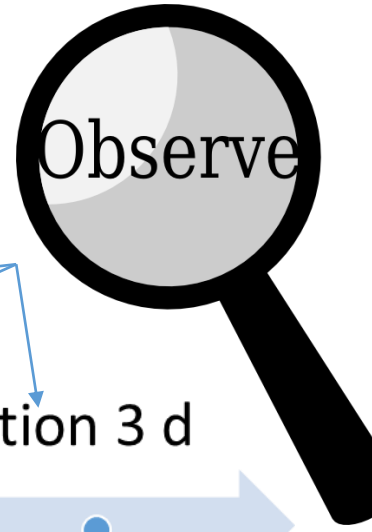
08.00-20.00

20.00-08.00

Together during the night

Study design

- ✓ High pitched vocalizations (No.)
- ✓ Low pitched vocalizations (No.)
- ✓ Head through separation barrier (s)
- ✓ Play (s)



Nursing phase 6 weeks

Total separation 3 d

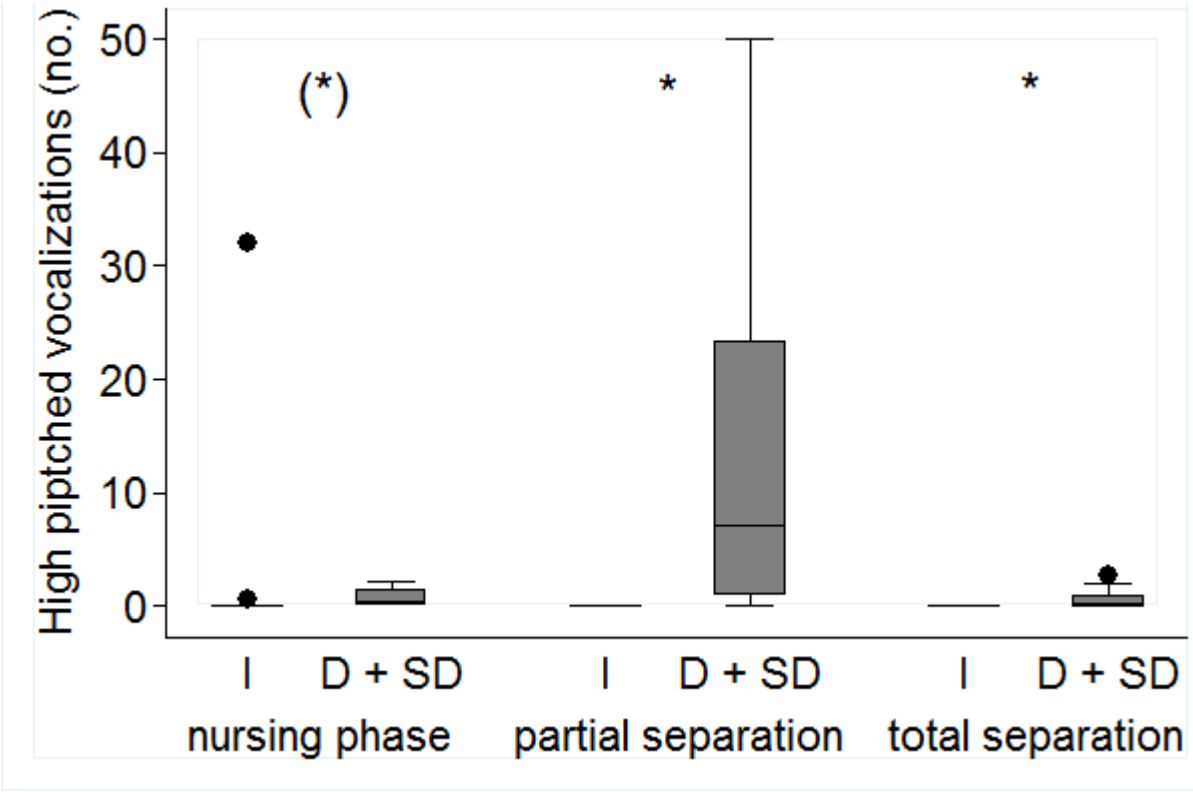
Partial separation 4 d

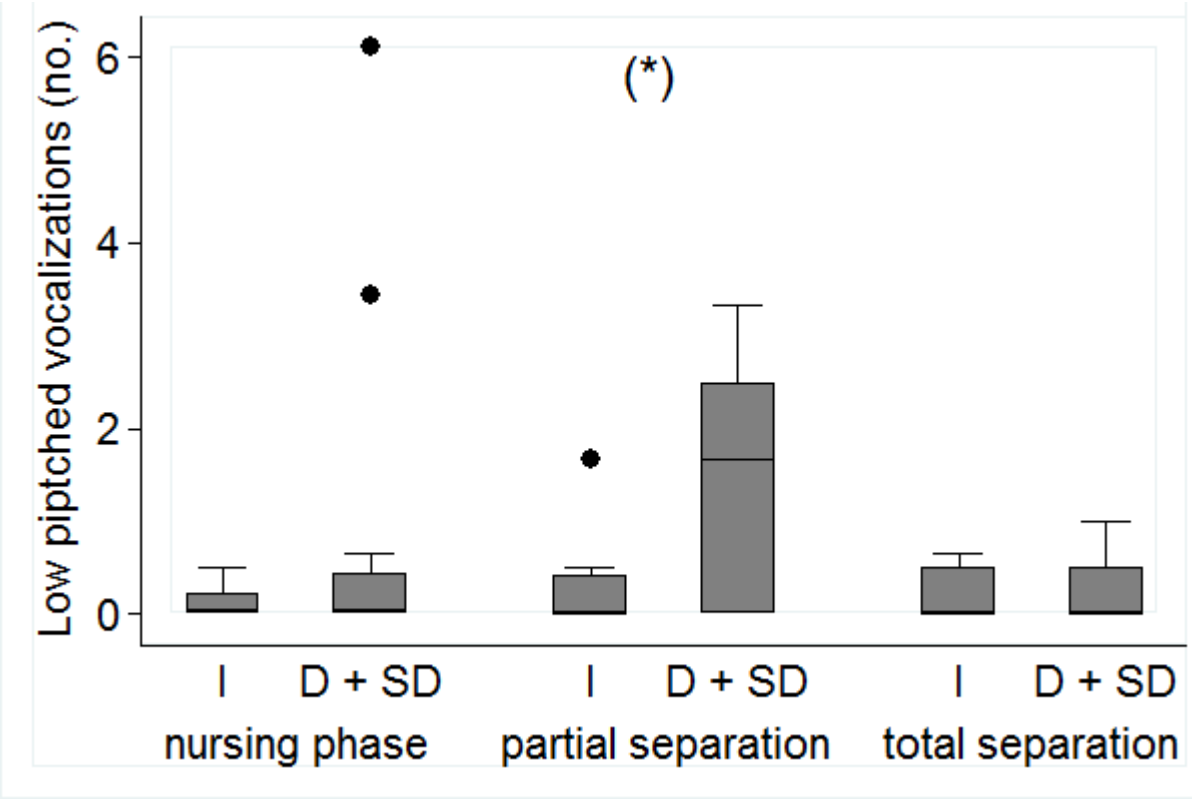
Milk feeding	Dependent (D) n=10	Semi-dependent (SD) n= 10	Independent (I) n=10
	✓	✓	
	⊘	✓	

Milk feeding	Dependent (D) n=10	Semi-dependent (SD) n= 10	Independent (I) n=10
	✓	✓	✓

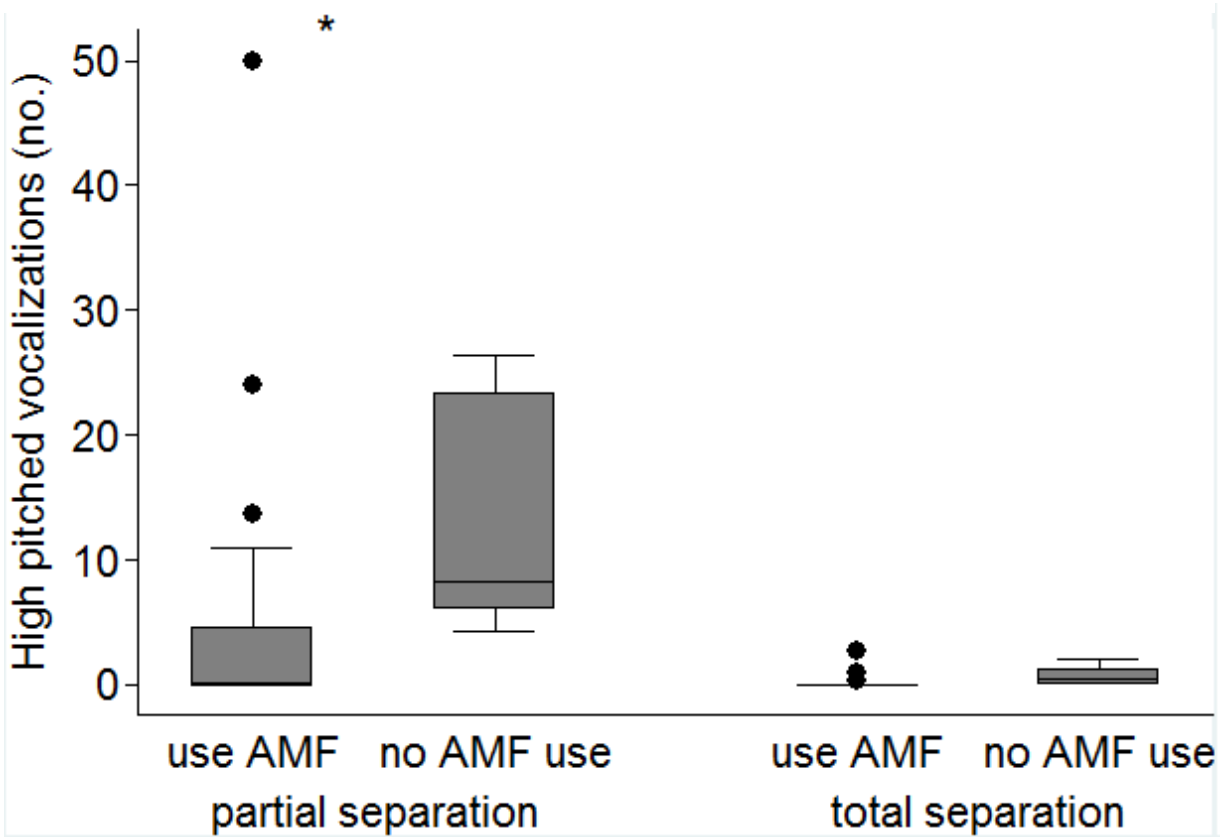
Results - vocalizations

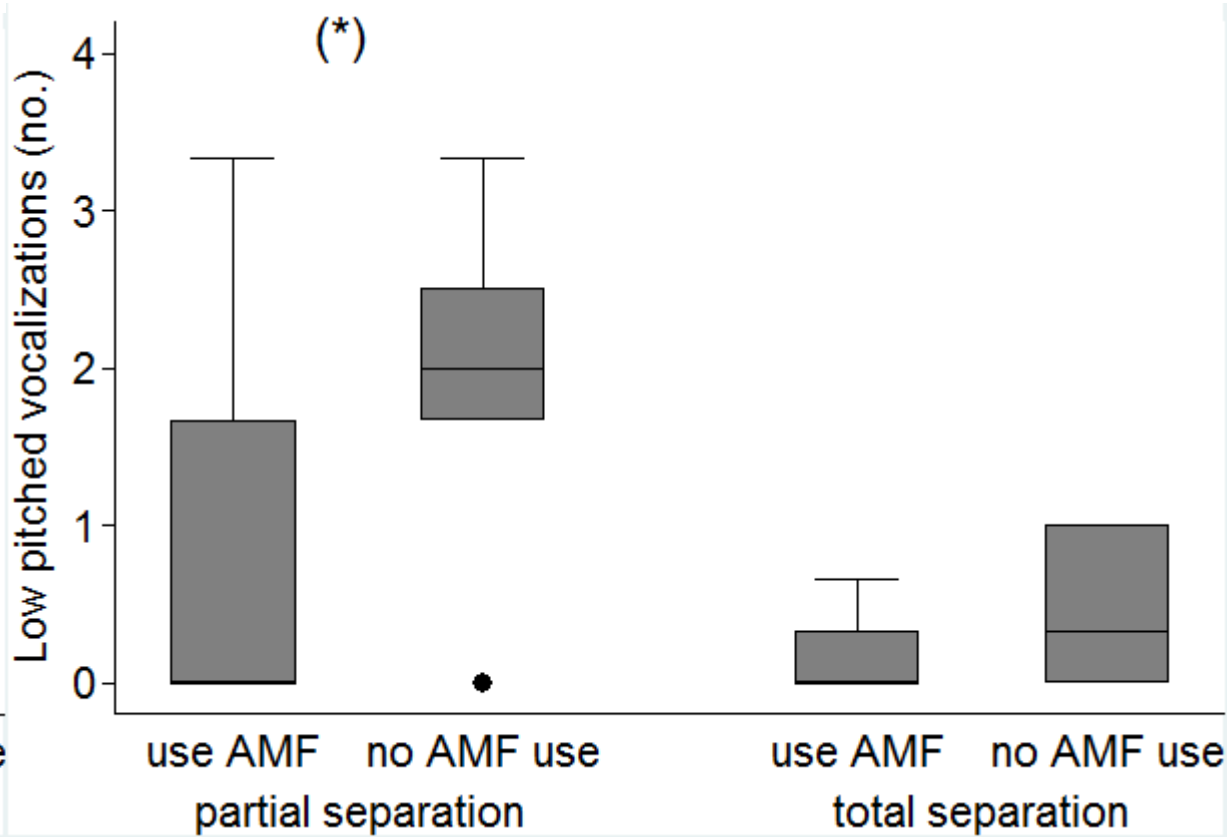
I=independent =AMF, no suckling
D=dependent=suckling only
SD=semi-dependen=AMF+suckling



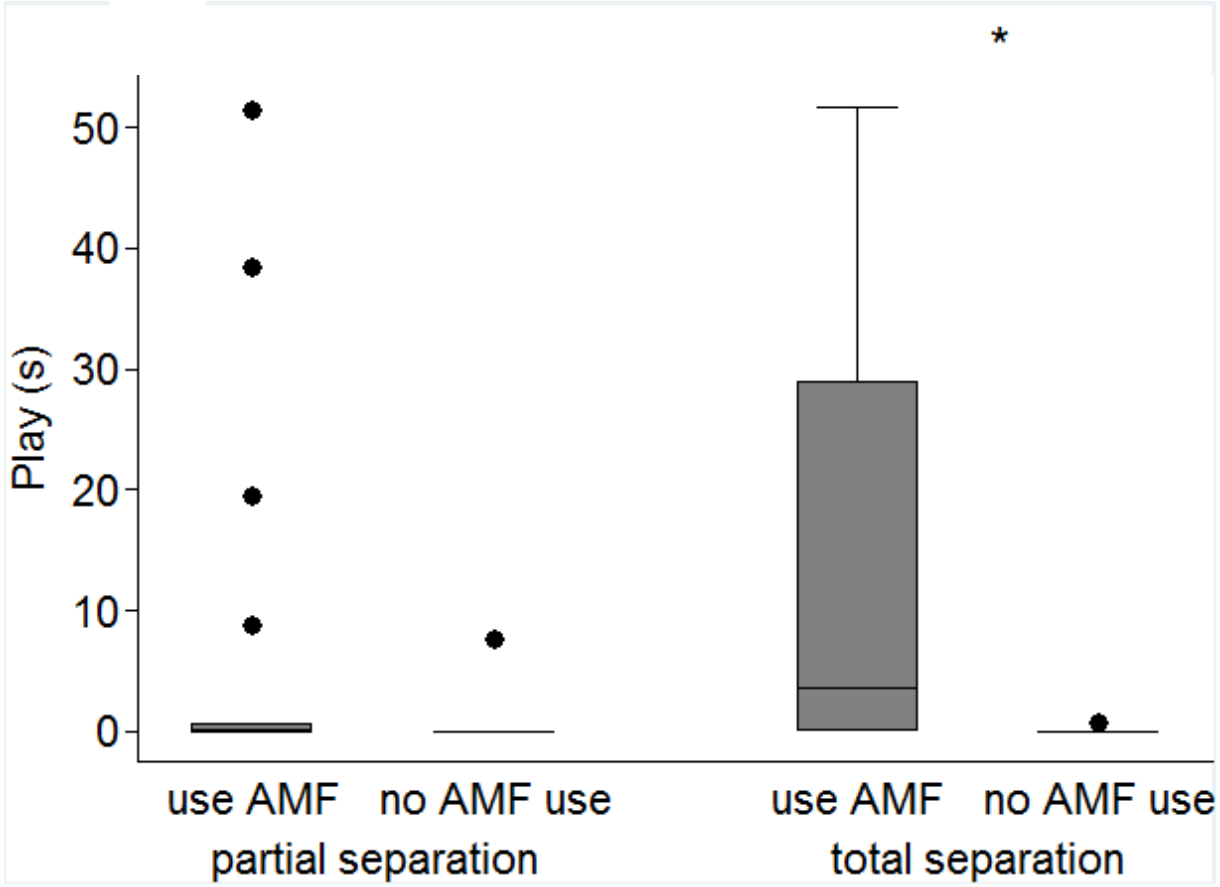


Results: vocalizations relative to AMF use after separation

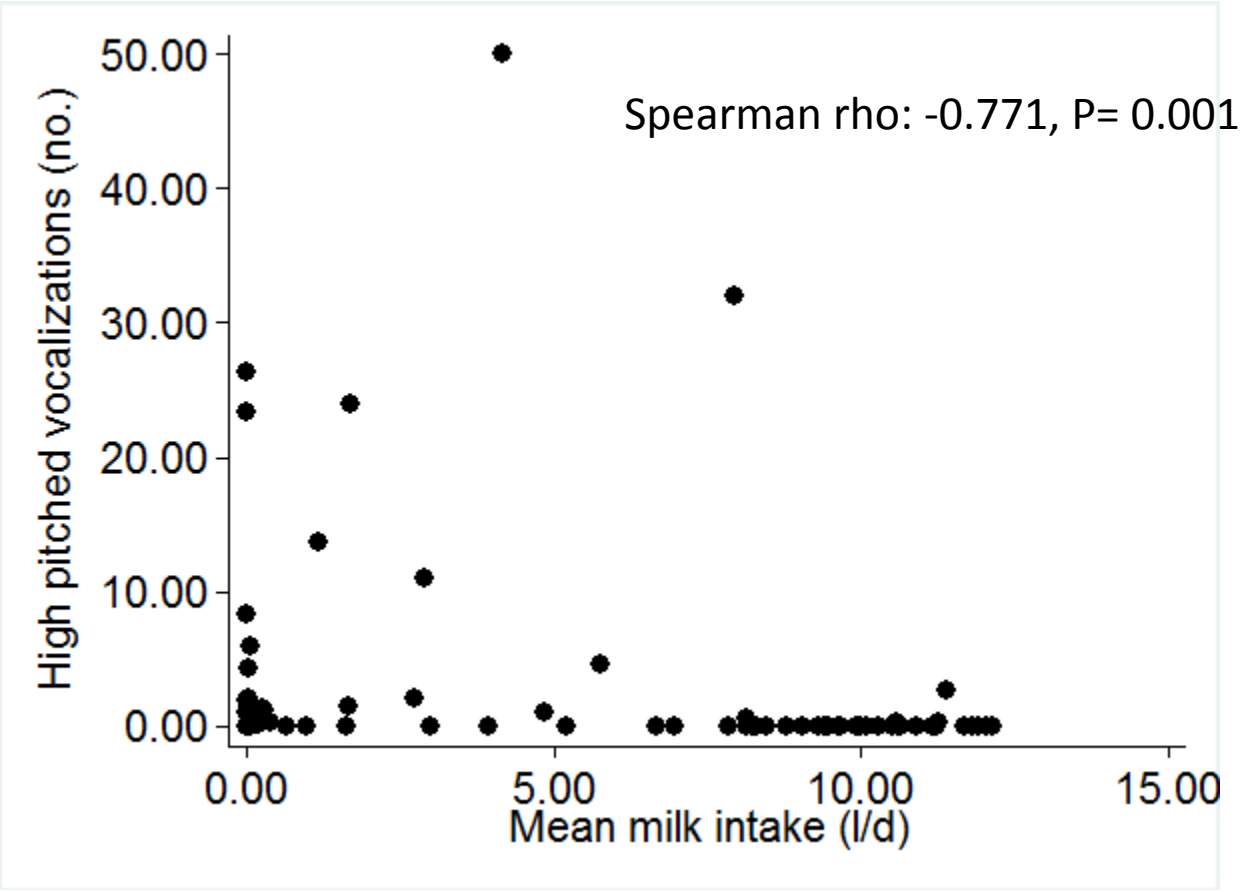




Results play

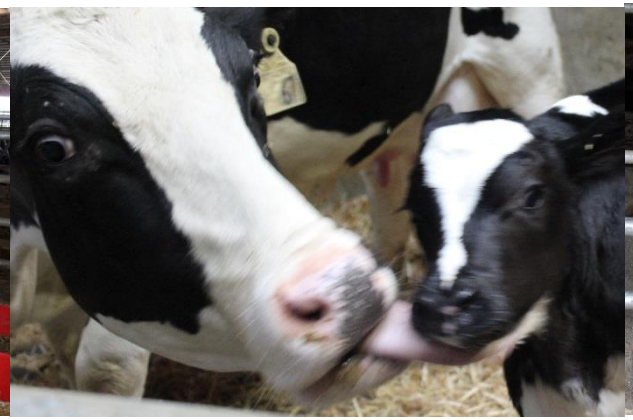
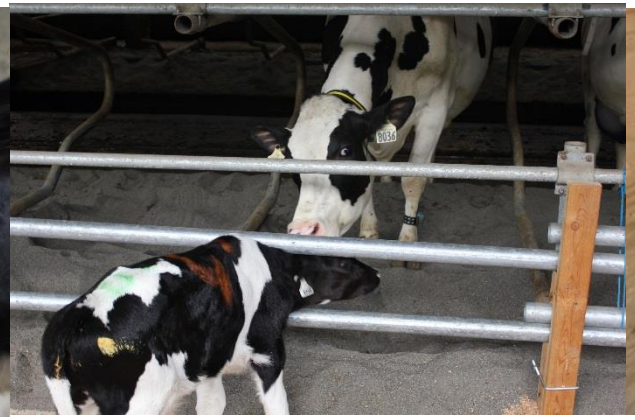


corr. milk&voc



Conclusion

- Implementing a supplemental milk source can reduce calf vocalizations and increase play behaviour after separation
- Training must be given


Applied Animal Behaviour Science 201 (2018) 1–6

Contents lists available at ScienceDirect

Applied Animal Behaviour Science

journal homepage: www.elsevier.com/locate/applanim

Behavioural responses to cow-calf separation: The effect of nutritional dependence

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Thanks to:
Joao HC Costa
Louise Buxant
Zoe Cocker
Johan Röjhammar
Gosia Zdanovich
John Luu
Rebecca Wright, and
Dhavan Vora
for technical assistance

Thank you for your attention!

Funding was granted by: Foundation for Research Levy on Agricultural Products (FFL) and the Agricultural Agreement Research Fund (JA) and the NSERC Discovery grants program to the Animal Welfare Program at The University of British Columbia

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