

Cow-calf contact systems for dairy: status of the literature

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Outline

- Pros & cons of cow-calf contact
 - What we expect
 - What we know
- Alternative systems proposed
- What's next?

Cow-calf separation



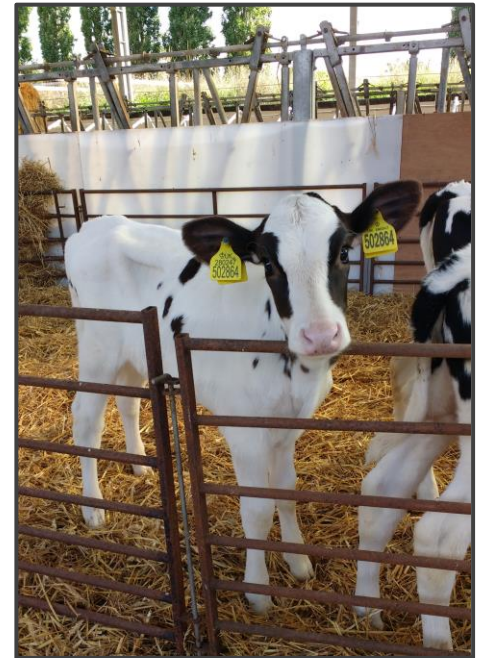
Can cheese become more 'ethical'?

A farm dairy in south west Scotland tries to respond to public criticism by "de-intensifying" the industry.

bbc.com

Expected benefits of early separation

- Protecting calf health
- Getting more saleable milk
- Reducing acute distress at separation



Are these supported by data?

- Improved calf health ✓?
- Increased saleable milk ✗
- Reduced acute distress at separation ✓



Possible benefits of longer contact

- During contact, for calves
 - Affiliative behaviour
 - Reduced abnormal behaviour
 - Reduced response to stressors?
 - Higher growth



Reviewed by Johnsen et al. 2016

Possible benefits of longer contact

- Later behaviour & welfare of calves
 - Improved immune function & health
 - Reduced stress responses & reaction to novelty
 - Appropriate social & maternal behaviour
 - Improved learning, flexibility

Known benefits of longer contact

- During contact
 - Affiliative behaviour ✓
 - Reduced abnormal behaviour - cross-sucking ✓
 - Reduced response to stressors ?
 - Higher growth ✓ (X)
- Later behaviour & welfare
 - Improved immune function & health ?
 - Reduced responses to stress & novelty ✓?
 - Appropriate social & maternal behaviour ✓?
 - More flexibility, improved learning ?

Alternative systems

- Dam rearing
 - Free, full contact
 - Half-day contact
 - Restricted suckling
- Foster/nurse cows
- Others?
 - Contact for 3 d only?
 - Limited contact e.g. fenceline, cuddle box



What research is needed?

- Overall health effects
 - Controlling Johne's?
- Long-term effects on behaviour & ability to adapt
- Relative effectiveness of alternative systems
- Effects on cow welfare
 - Foster cows
- Practicalities
 - Monitoring calves, reducing labour, over-milking quarters

Thank you

