Calf rearing in organic dairy production

Julie F. Johnsen, Kristian Ellingsen, Ann M. Grøndahl, Cecilie M. Mejdell

Norwegian Veterinary Institute, Section for disease prevention and animal welfare, P.O. Box 750 Sentrum, N-0106 Oslo, Norway.

Introduction
Organic farmers interpret animal welfare primarily in terms of natural living. In Norway (and in Sweden until 31.12.2011) it is mandatory for organic producers to let the calf suckle the cow during the colostrum period (days 0-3). The rule was implemented to ensure a higher level of welfare for the animals, but the period also allows for stronger bonding between calf and cow. Research has shown that separation may cause behavioral reactions such as vocalization and increased activity. We wanted to investigate Norwegian and Swedish organic farmers’ experiences with suckling and separation stress.

Materials & Methods
A QuestBack® survey regarding calf rearing was distributed to 157 Norwegian and 119 Swedish organic dairy producers during autumn/winter 2011. In total 131 farmers responded, 83 Norwegian (53%) and 47 (40%) Swedish. The respondents were asked to give their replies to a number statements on a scale from 1 (= totally disagree) to 7 (= totally agree).

Results
• Suckling during the colostrum period is perceived to constitute a good start for the calf (mean = 6.39, SD = 1.6)
• The positive effects of suckling is perceived to outweigh the stress at separation both for cow (mean = 4.75, SD = 2.1) and calf (mean = 4.44, SD = 2.4)

How can separation stress be minimized?
- Keep the calf satiated subsequent to separation (mean = 4.81, SD = 2.1)
- Perform abrupt rather than gradual separation (mean = 4.60, SD = 2.2)
• The cow is perceived to suffer for a longer period following separation (mean = 2.56 days, SD = 1.2) than does the calf (mean = 1.92 days, SD = 1.2)
• Vocalizing subsequent to separation is perceived to reflect a strong bond, but the respondents do not feel that the vocal reaction reflects poor welfare (mean = 4.33, SD = 2.1)
• In your opinion should the three day suckling rule be prolonged or removed?

Conclusion
Organic farmers utilize a wide variety of practices for suckling and separation and experiences vary. This constitutes an important resource for finding and testing management practices that may improve animal welfare and diminish stress at separation. Farmers’ increased awareness of their animals’ behaviours may provide improvements in welfare and production in the years to come.